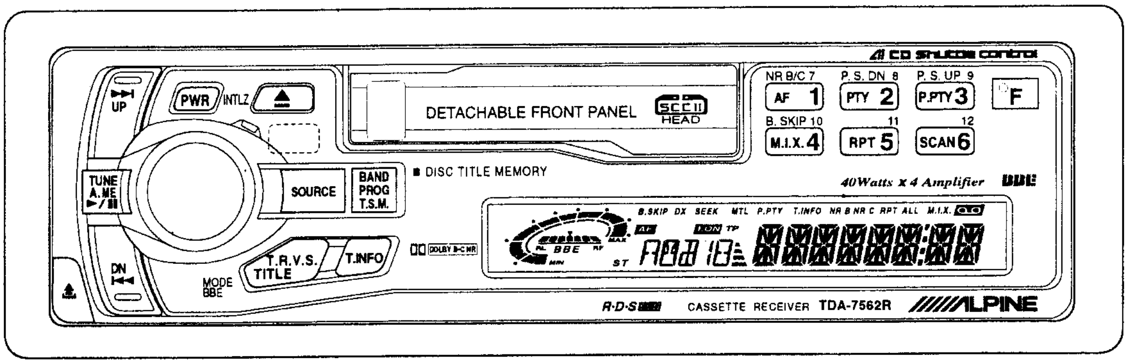
ALPINE

SERVICE MANUAL

FM/MW/LW/RDS Cassette Receiver

CD Shuttle Controller

- The model described in this manual is developed from Model TDA-7659R. For information that is not mentioned in this service manual, refer to the Service Manual • TDA-7659R (Part No. 68E23869S01
- For the cassette deck mechanism parts (GR75S230) of this model, refer to the Service Manual · GR-S SERIES • ADDENDUM & REVISED (II) (Part No. 68E26177S01).


CD shuttle control
UP
PWR
INTLZ
DETACHABLE FRONT PANEL
SCC II HEAD
NR B/C 7
P. S. DN 8
P. S. UP 9
AF 1
PTY 2
P.PTY 3
F
B. SKIP 10
11
12
M.I.X. 4
RPT 5
SCAN 6
TUNE A.ME ►/II
SOURCE
BAND PROG T.S.M.
DISC TITLE MEMORY
40Watts x 4 Amplifier
BBE
B.SKIP DX SEEK MTL P.PTY T.INFO NR B NR C RPT ALL M.I.X.
AF
TP
ST
DN
MODE BBE
T.R.V.S. TITLE
T.INFO
DOLBY B-C NR
R·D·S
CASSETTE RECEIVER TDA-7562R
ALPINE

(TDA-7562R)

TDA-7562R/
TDA-7560R

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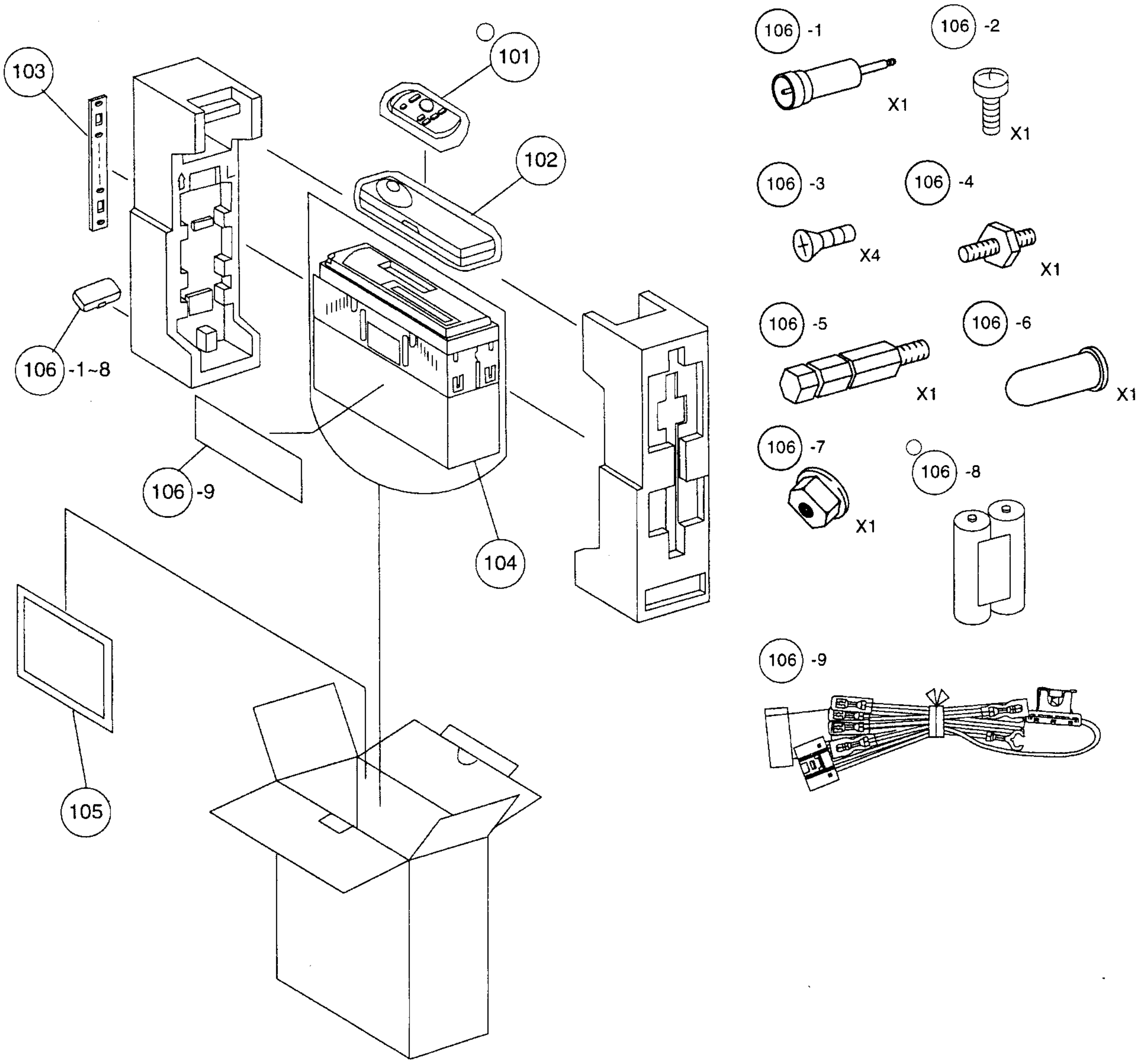
Schematic Diagram (GR Control/GR Audio/Photo/ Sub Motor) — Refer to the Service Manual • TDA-7659R (Part No.68E23869S01).

Packing Assembly Parts List

Symbol No.		Part No.	Description
○	101	01T00716K02	Assy., Remocon
	102	15D10867Y01	Carrying, Case
	103	07E09438S01	Bracket, Strap Receiver
	104	15E21170S01	Case, Inner
	105-1	68P91666W74	Owner's Manual
	105-2	68P91666W75	Owner's Manual (I/G/S)
○	106	01E27772S01	Assy., Kit Installation
△	106	01E27779S01	Assy., Kit Installation
	106-1	01T15394Y02	Antenna, JASO-ISO
	106-2	03E27862S01	Screw, TPG2 (M1.7X4)
	106-3	03E10240S02	Screw, MCH (M5X8)
	106-4	03E11374S01	Stud, Bolt
	106-5	03E27739S01	Bolt, Hex. (M5)
	106-6	75E27734S01	Cap, Rubber
	106-7	02E20771S01	Nut, Hex. (M5)
○	106-8	60T55630W01	Battery, MGN R03 (NB) UM-4
	106-9	01E27773S01	Assy., Power Wire (15A)

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Packing Method View


103
○ 101
102
106 -1~8
106 -9
104
105
106 -1
X1
106 -2
X1
106 -3
X4
106 -4
X1
106 -5
X1
106 -6
X1
106 -7
X1
○ 106 -8
106 -9

Specifications

NOTE : Refer to the Service Manual • TDA-7659R (Part No. 68E23869S01) for description not mentioned in this manual.

FM RADIO

S/N Ratio (Stereo, at 98.1MHz)	55dB

MW RADIO

Image Rejection (at 603kHz)	40dB
IF Rejection (at 603kHz)	40dB

TAPE PLAYER

Distortion (MTT-118)	2%

GENERAL

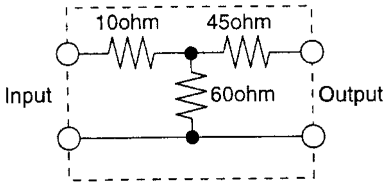
Power Output (T.H.D. 10%) /Impedance	16W/ch/4ohm

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

Adjustment Procedures

1. FM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
60ohm
Input
Output

For 50 ohm FM Signal Generator

Figure 1

(2) Connections

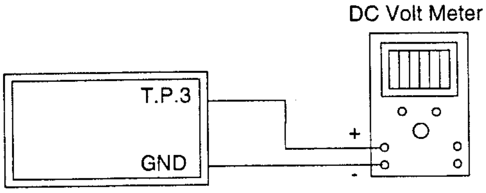

DC Volt Meter
T.P.3
GND
+
-

Figure 2

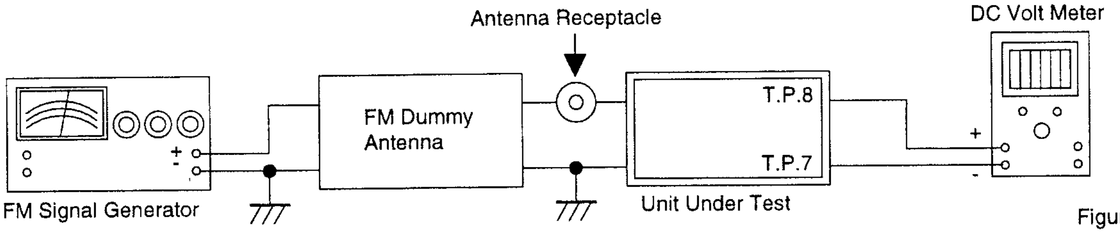

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.8
T.P.7
+
-
FM Signal Generator
Unit Under Test

Figure 3

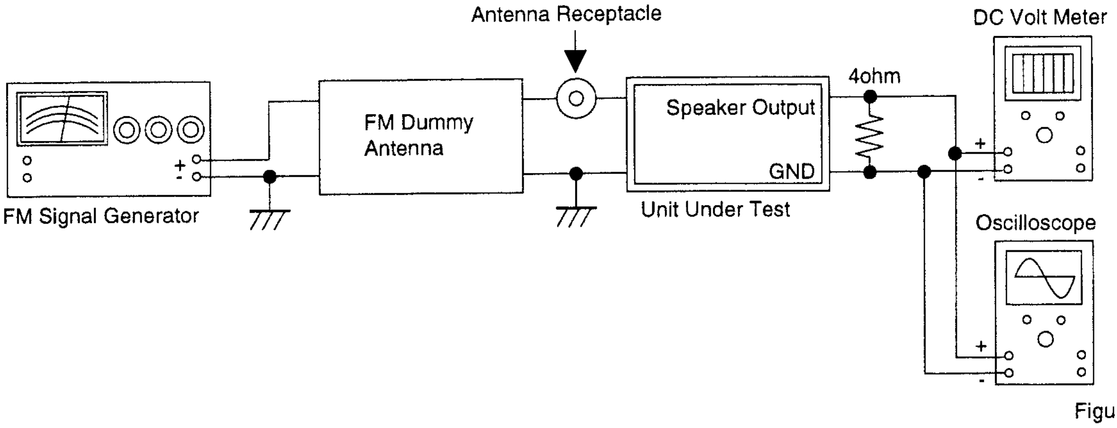

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
Speaker Output
GND
4ohm
+
-
FM Signal Generator
Unit Under Test
Oscilloscope

Figure 4

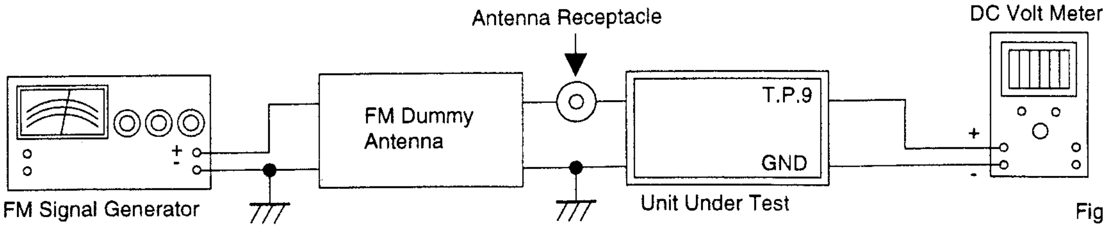

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.9
GND
+
-
FM Signal Generator
Unit Under Test

Figure 5

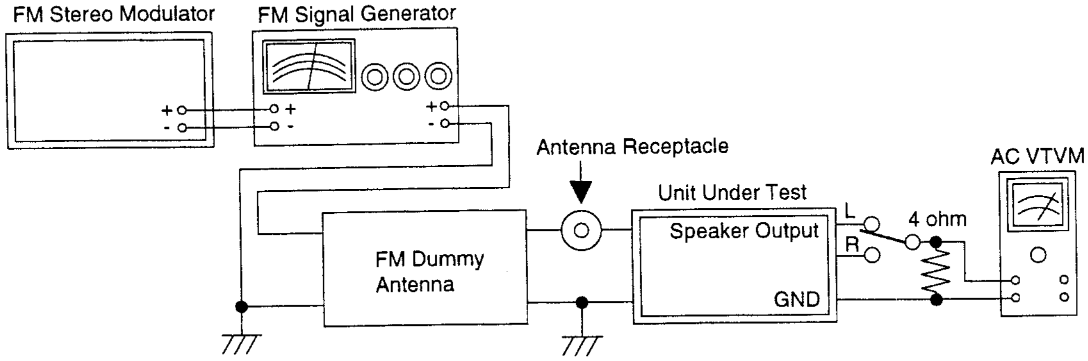


Figure 6

(3) Control Settings

Power Switch	ON	Treble/Bass Control	Center Position
Fader Control	Center Position	Band Switch	FM
Balance Control	Center Position	Others	OFF

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator	Dial Control	Test Point/ P.W.Board Coordinates	Adjustment
1	VT Adjustment	Figure 2	—	Max.	T.P.3 (2-B)	Adjust L2006 for 7.5V.
2	IF Adjustment	Figure 3	98.1MHz, 60dB μ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.7 (4-B) T.P.8 (4-B)	Adjust L2101 for 0±20mV.
3	Ant. Coil Adjustment	Figure 4	90.1MHz, 20dB μ (Mod. 400Hz, Dev. 40kHz)	90.1MHz	Speaker Output	Adjust L2002 for max. output.
4	RF Coil Adjustment	Figure 4	90.1MHz, 20dB μ (Mod. 400Hz, Dev. 40kHz)	90.1MHz	Speaker Output	Adjust L2005 for max. output.
5	IFT Coil Adjustment	Figure 4	98.1MHz, 20dB μ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	Speaker Output	Adjust T2001 for max. output.
6	Signal Meter Adjustment	Figure 5	98.1MHz, 34dB μ (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.9 (3-B)	Adjust VR2101 to 3.5V.
7	Stereo Blend Adjustment (Lch)	Figure 6	98.1MHz, 34dB μ (Mod. 1kHz, Dev. 36kHz, Stereo, Lch Only)	98.1MHz	Speaker Output	Adjust VR2102 for Lch and Rch output level difference to be 8dB.
8	Stereo Blend Adjustment (Rch)	Figure 6	98.1MHz, 34dB μ (Mod. 1kHz, Dev. 36kHz, Stereo, Rch Only)	98.1MHz	Speaker Output	Proceed same adjustment under step 7.

2. MW/LW SECTION

(1) Dummy Antenna Circuit

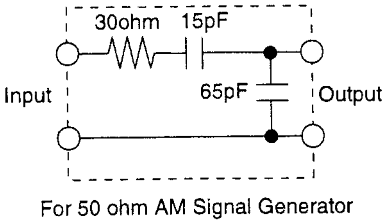

30ohm
15pF
Input
65pF
Output
For 50 ohm AM Signal Generator

Figure 7

(2) Connections

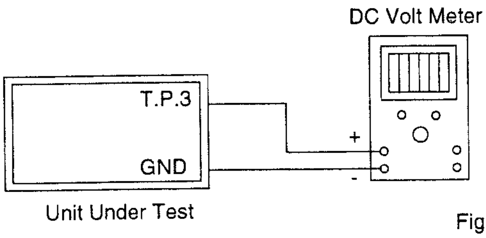

DC Volt Meter
T.P.3
GND
+
-
Unit Under Test

Figure 8

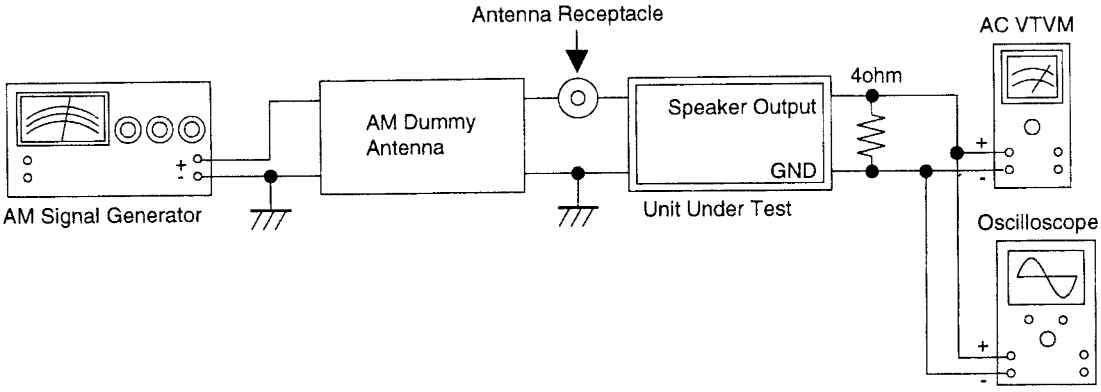

Antenna Receptacle
AC VTVM
4ohm
AM Signal Generator
AM Dummy Antenna
Speaker Output
GND
Unit Under Test
Oscilloscope
+
-

Figure 9

(3) Control Settings

Power Switch .... ON

Fader Control .... Center Position

Balance Control .... Center Position

Treble/Bass Control .... Center Position

Band Switch .... LW/MW

Others .... OFF

(4) Adjustment Procedures

Step	Description	Connection	Signal Generator	Dial Control	Test Point/ P.W.Board Coordinates	Adjustment
1	VT Adjustment	Figure 8	—	LW f. Max.	T.P.3 (2-B)	Adjust L2204 for 7.5V.
2	LW RF Coil Adjustment	Figure 9	162kHz, 30dB μ (Mod. 400Hz, 30%)	162kHz	Speaker Output	Adjust L2202 for max. output.
3	MW RF Coil Adjustment	Figure 9	603kHz, 30dB μ (Mod. 400Hz, 30%)	603kHz	Speaker Output	Adjust L2203 for max. output.
4	MW IFT Coil Adjustment	Figure 8	999kHz, 40dB μ (Mod. 400Hz, 30%)	999kHz	Speaker Output	Adjust T2201, 2202 for max. output.

3. TAPE PLAYER SECTION

(1) Connection

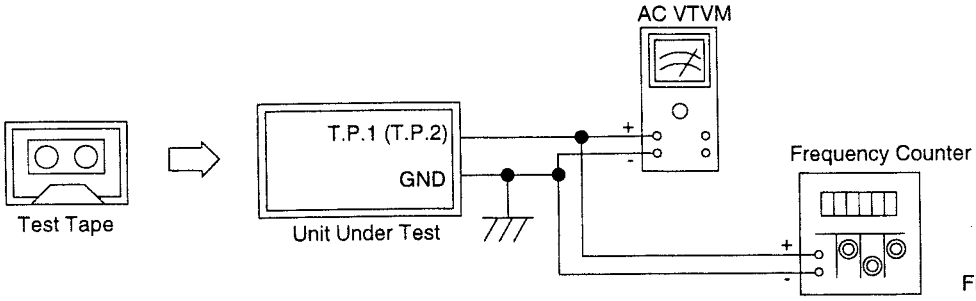


Figure 10

(2) Control Settings

Power Switch	ON
Fader Control	Center Position
Balance Control	Center Position
Treble/Bass Control	Center Position
Others	OFF

(3) The necessaries for adjustment
GR-S Extension Cord
Assy., EX Cord Kit for GR-S Mechanism
Part No. 01E23255S01
See Adjustment Locations (Figure 13).

(4) Adjustment Procedures

Step	Description	Test Tape	Connection	Test Point/ P.W.Board Coordinates	Adjustment Point	Adjustment
1	Head Azimuth Adjustment	MTT-114NB (14kHz)	Figure 10	T.P.1 (Lch) (2-C) T.P.2 (Rch) (2-C)	Head Azimuth Adjustment screws (Figure 11)	Adjust for Max. and same level output at Forward and Reverse positions.
2	Dolby Level Adjustment	MTT-150 (400Hz)	Figure 10	T.P.1 (Lch) (2-C) T.P.2 (Rch) (2-C)	VR201 (Lch) VR202 (Rch)	Adjust for 388mV at T.P.1 (Lch) and T.P.2 (Rch).
3	Tape Speed Adjustment	MTT-111N (3kHz)	Figure 10	T.P.1 (Lch) (2-C) or T.P.2 (Rch) (2-C)	Tape Speed Adjustment (Figure 12)	Adjust for 2,970 to 3,090Hz at T.P.1 (T.P.2).

Adjustment Locations

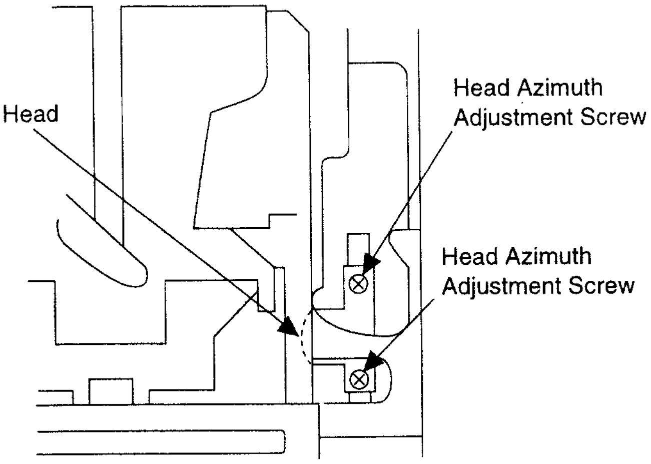

Head
Head Azimuth Adjustment Screw
Head Azimuth Adjustment Screw

Figure 11

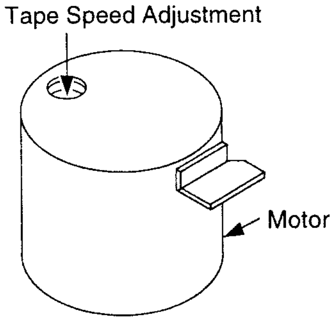

Tape Speed Adjustment
Motor

Figure 12

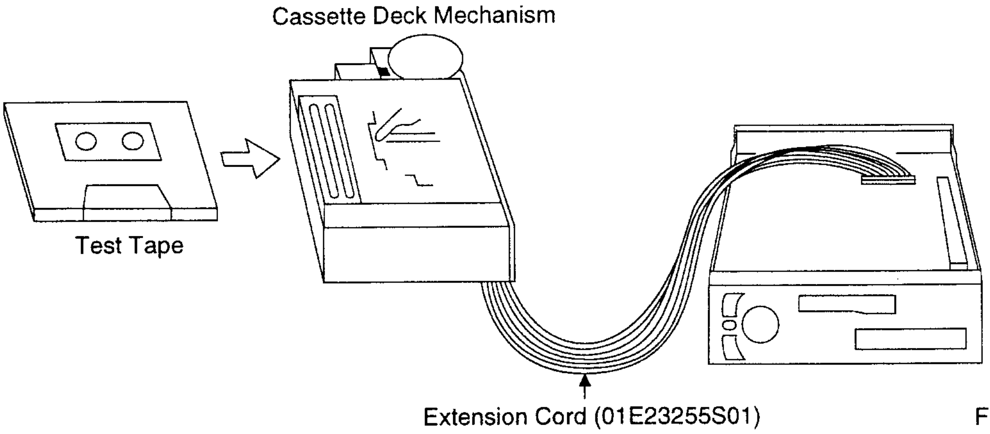
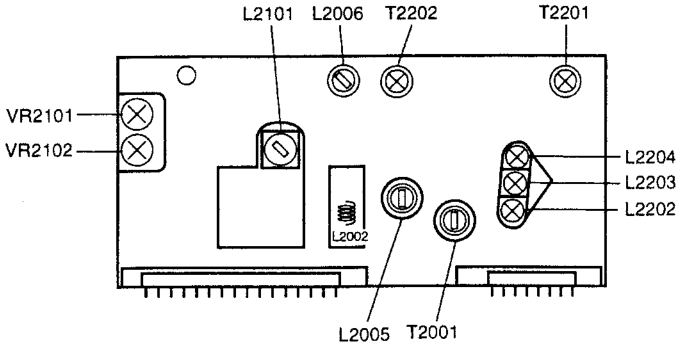

Cassette Deck Mechanism
Test Tape
Extension Cord (01E23255S01)

Figure 13

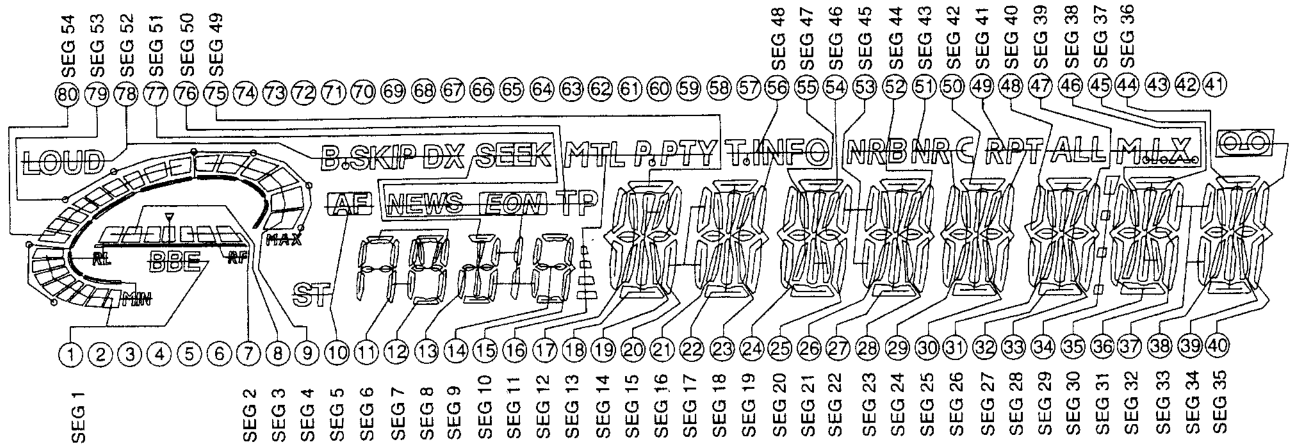

L2101
L2006
T2202
T2201
VR2101
VR2102
L2002
L2204
L2203
L2202
L2005
T2001

FM/MW/LW Tuner Unit (FE001)

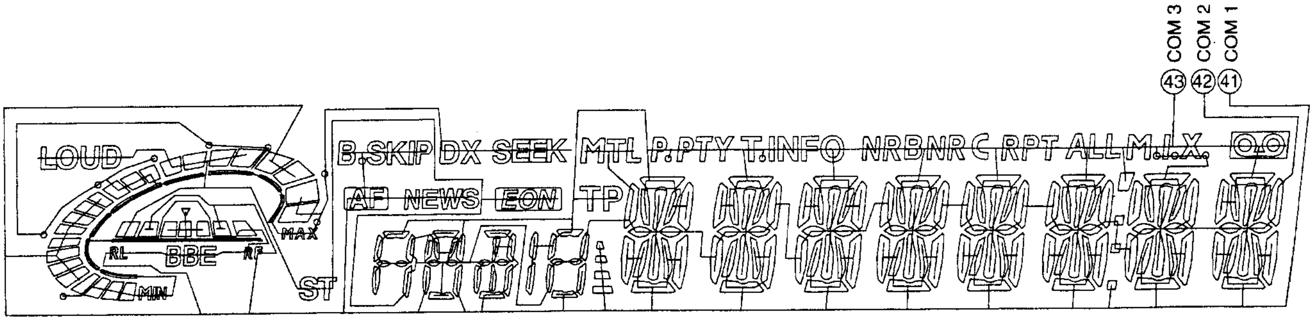
NOTE : For the Test Points, refer to the Parts Layout on P.W. Boards and Wiring Diagram.

LCD Display

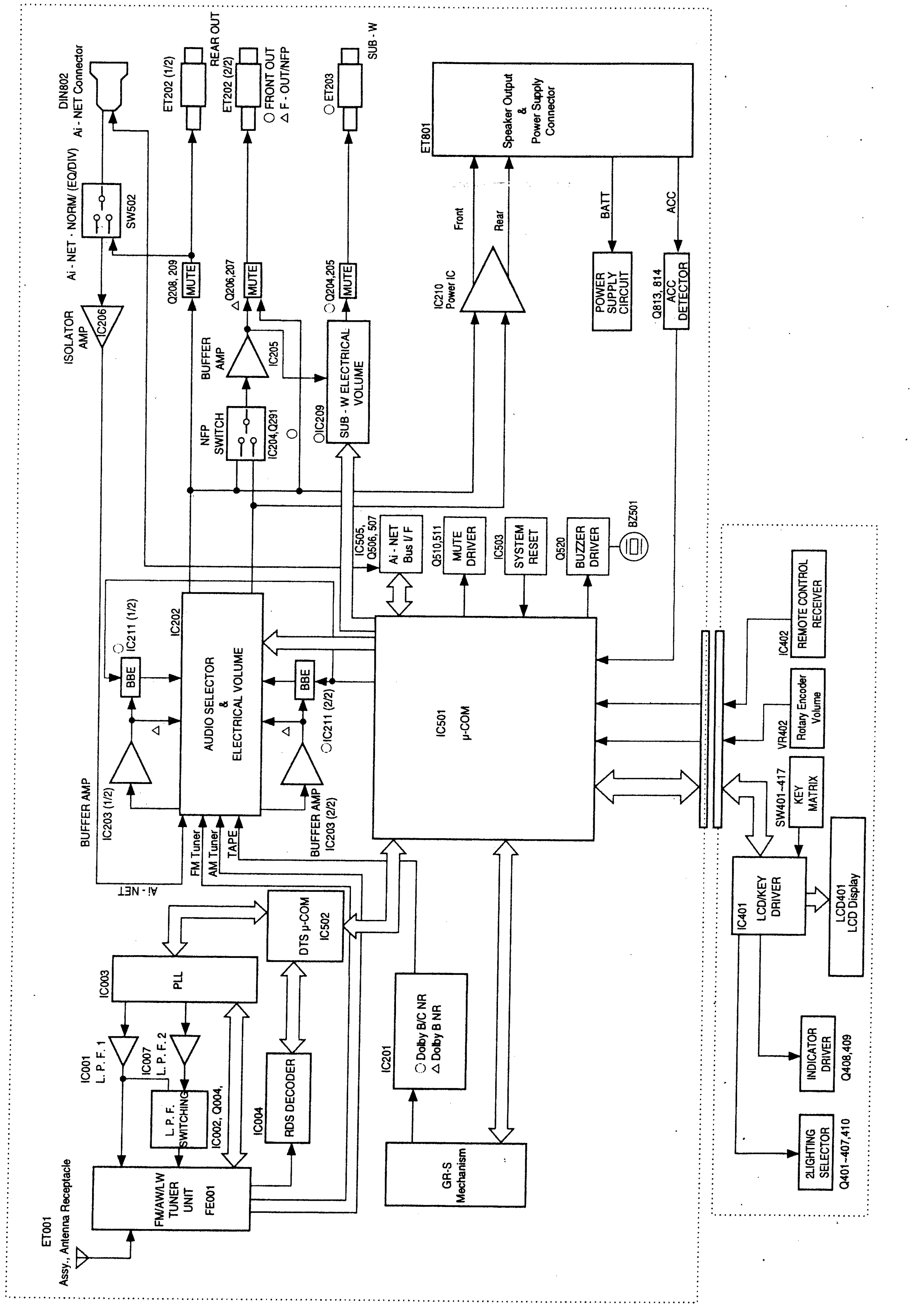
SEGMENT


SEG 54
SEG 53
SEG 52
SEG 51
SEG 50
SEG 49
SEG 48
SEG 47
SEG 46
SEG 45
SEG 44
SEG 43
SEG 42
SEG 41
SEG 40
SEG 39
SEG 38
SEG 37
SEG 36
LOUD
B.SKIP
DX
SEEK
MTL
P.PTY
T.INFO
NR
B NR
C
RPT
ALL
M.I.X.
O.O
AF
NEWS
EON
TP
ST
RL
BBE
RF
MAX
MIN
SEG 1
SEG 2
SEG 3
SEG 4
SEG 5
SEG 6
SEG 7
SEG 8
SEG 9
SEG 10
SEG 11
SEG 12
SEG 13
SEG 14
SEG 15
SEG 16
SEG 17
SEG 18
SEG 19
SEG 20
SEG 21
SEG 22
SEG 23
SEG 24
SEG 25
SEG 26
SEG 27
SEG 28
SEG 29
SEG 30
SEG 31
SEG 32
SEG 33
SEG 34
SEG 35

COMMON

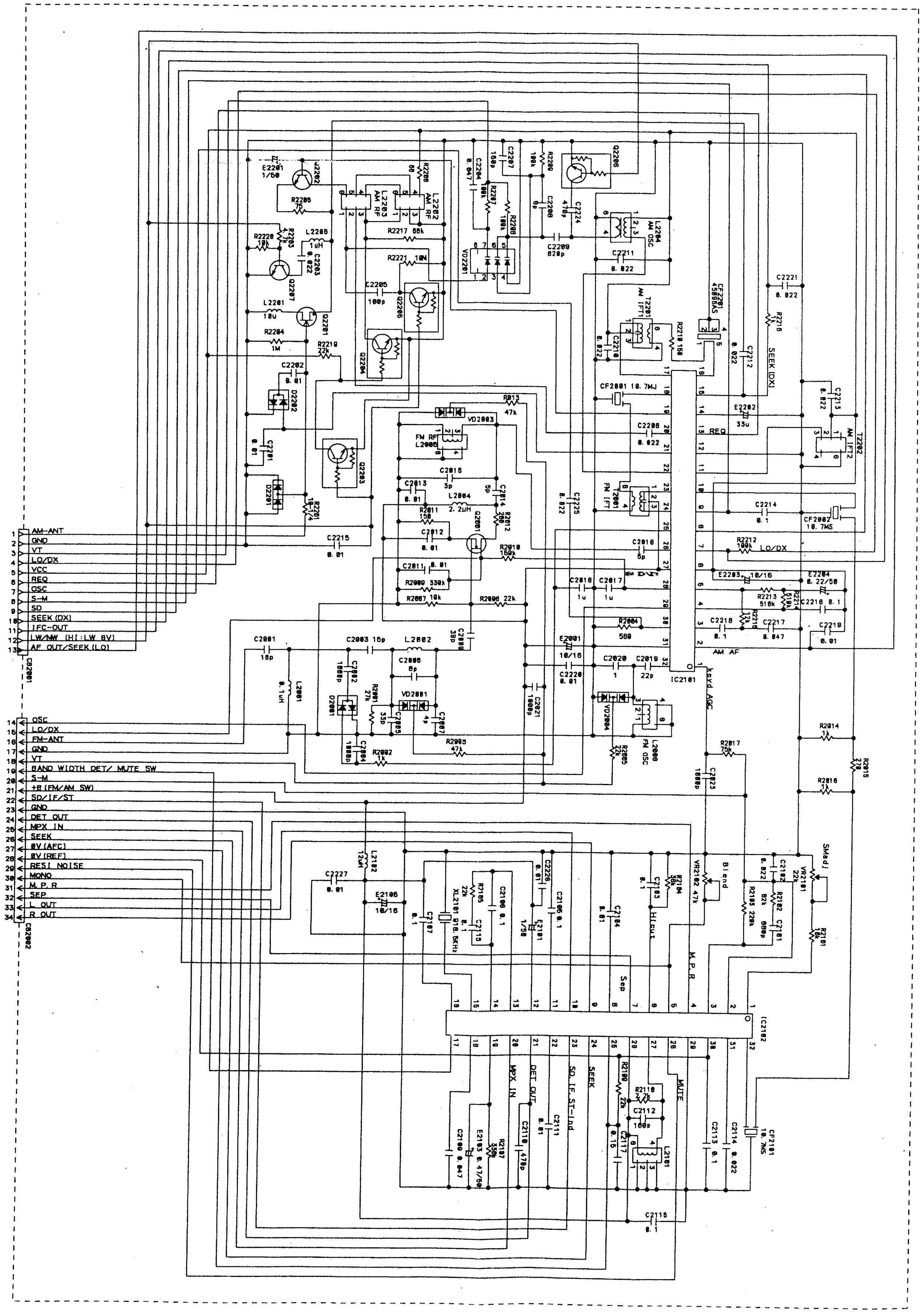

COM 3
COM 2
COM 1
43
42
41
LOUD
B.SKIP
DX
SEEK
MTL
P.PTY
T.INFO
NR
B NR
C
RPT
ALL
M.I.X.
O.O
AF
NEWS
EON
TP
ST
RL
BBE
RF
MAX
MIN

Block Diagram


DIN802 Ai - NET Connector
Ai - NET・NORM/ (EQ/DIV)
SW502
ISOLATOR AMP
IC206
ET202 (1/2)
REAR OUT
Q208, 209
MUTE
ET202 (2/2)
○ FRONT OUT
△ F - OUT/NFP
△ Q206,207
BUFFER AMP
IC205
NFP SWITCH
IC204,Q291
○ ET203
SUB - W
○ Q204,205
SUB - W ELECTRICAL VOLUME
○ IC209
ET801
Speaker Output & Power Supply Connector
Front
Rear
IC210 Power IC
BATT
ACC
POWER SUPPLY CIRCUIT
Q813, 814
ACC DETECTOR
IC505
Q506, 507
Ai - NET Bus I/F
Q510,511
MUTE DRIVER
IC503
SYSTEM RESET
Q520
BUZZER DRIVER
BZ501
○ IC211 (1/2)
BBE
IC202
AUDIO SELECTOR & ELECTRICAL VOLUME
○ IC211 (2/2)
IC501
µ-COM
IC402
REMOTE CONTROL RECEIVER
VR402
Rotary Encoder Volume
SW401-417
KEY MATRIX
BUFFER AMP
IC203 (1/2)
BUFFER AMP
IC203 (2/2)
Ai - NET
FM Tuner
AM Tuner
TAPE
IC401
LCD/KEY DRIVER
LCD401
LCD Display
IC003
PLL
DTS µ-COM
IC502
IC201
○ Dolby B/C NR
△ Dolby B NR
INDICATOR DRIVER
Q408,409
LIGHTING SELECTOR
Q401-407,410
IC001
L.P.F. 1
IC007
L.P.F. 2
L.P.F. SWITCHING
IC002, Q004,
IC004
RDS DECODER
FM/AM/LW TUNER UNIT
FE001
GR-S Mechanism
ET001
Assy. Antenna Receptacle

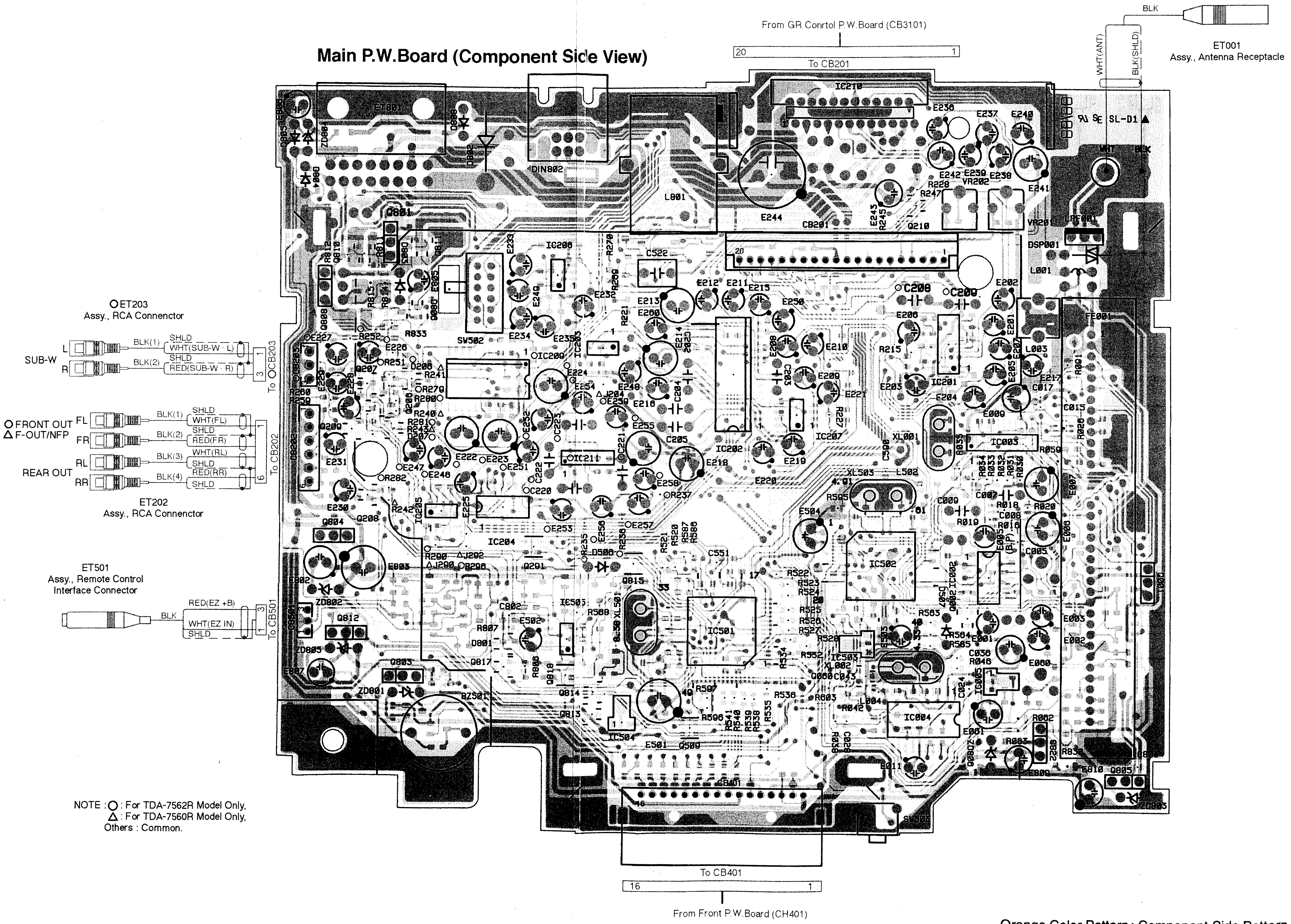
NOTE : ○ : For TDA-7562R Model Only,   △ : For TDA-7560R Model Only,   Others :Common.

Tuner Schematic Diagram


1 AM-ANT
2 GND
3 VT
4 LO/DX
5 VCC
6 REQ
7 OSC
8 S-M
9 SD
10 SEEK (DX)
11 IFC-OUT
12 LW/MW (HI:LW 8V)
13 AF OUT/SEEK (LO)
14 OSC
15 LO/DX
16 FM-ANT
17 GND
18 VT
19 BAND WIDTH DET/ MUTE SW
20 +B (FM/AM SW)
21 SD/IF/ST
22 GND
23 DET OUT
24 MPX IN
25 SEEK
26 8V (AFC)
27 8V (REF)
28 BEST NOISE
29 MONO
30 M.P.R
31 SEP
32 L OUT
33 R OUT
IC2101
IC2102
AM AF
LO/DX
SEEK (DX)
REQ
CF2001 10.7MJ
FM IFT
FM OSC
FM RF
AM OSC
AM RF
AM IFT1
AM IFT2
Blend
Sep
M.P.R
MUTE
SEEK
SD IF ST-Ind.
MPX IN
DET OUT
Hi-Cut

Parts Layout on P.W. Boards and Wiring Diagram (1/3)

Main P.W.Board (Component Side View)


From GR Conrtol P.W.Board (CB3101)
20
1
To CB201
BLK
WHT(ANT)
BLK(SHLD)
ET001
Assy., Antenna Receptacle
○ET203
Assy., RCA Connector
SUB-W
L
R
BLK(1)
BLK(2)
SHLD
WHT(SUB-W · L)
SHLD
RED(SUB-W · R)
1
3
To ○CB203
○FRONT OUT
△F-OUT/NFP
REAR OUT
FL
FR
RL
RR
BLK(1)
BLK(2)
BLK(3)
BLK(4)
SHLD
WHT(FL)
SHLD
RED(FR)
WHT(RL)
SHLD
RED(RR)
SHLD
1
6
To CB202
ET202
Assy., RCA Connector
ET501
Assy., Remote Control
Interface Connector
BLK
RED(EZ +B)
WHT(EZ IN)
SHLD
1
3
To CB501
ET801
DIN802
IC210
L801
E244
CB201
SL-D1
WHT
BLK
DSP001
IC206
SW502
IC202
IC201
IC207
IC211
IC204
IC205
IC502
IC501
IC503
IC504
IC003
IC004
XL001
XL501
XL503
XL002
BZ501
CB401
16
1
To CB401
16
1
From Front P.W.Board (CH401)

NOTE : ○ : For TDA-7562R Model Only,
△ : For TDA-7560R Model Only,
Others : Common.

Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.W. Boards and Wiring Diagram (2/3)

1

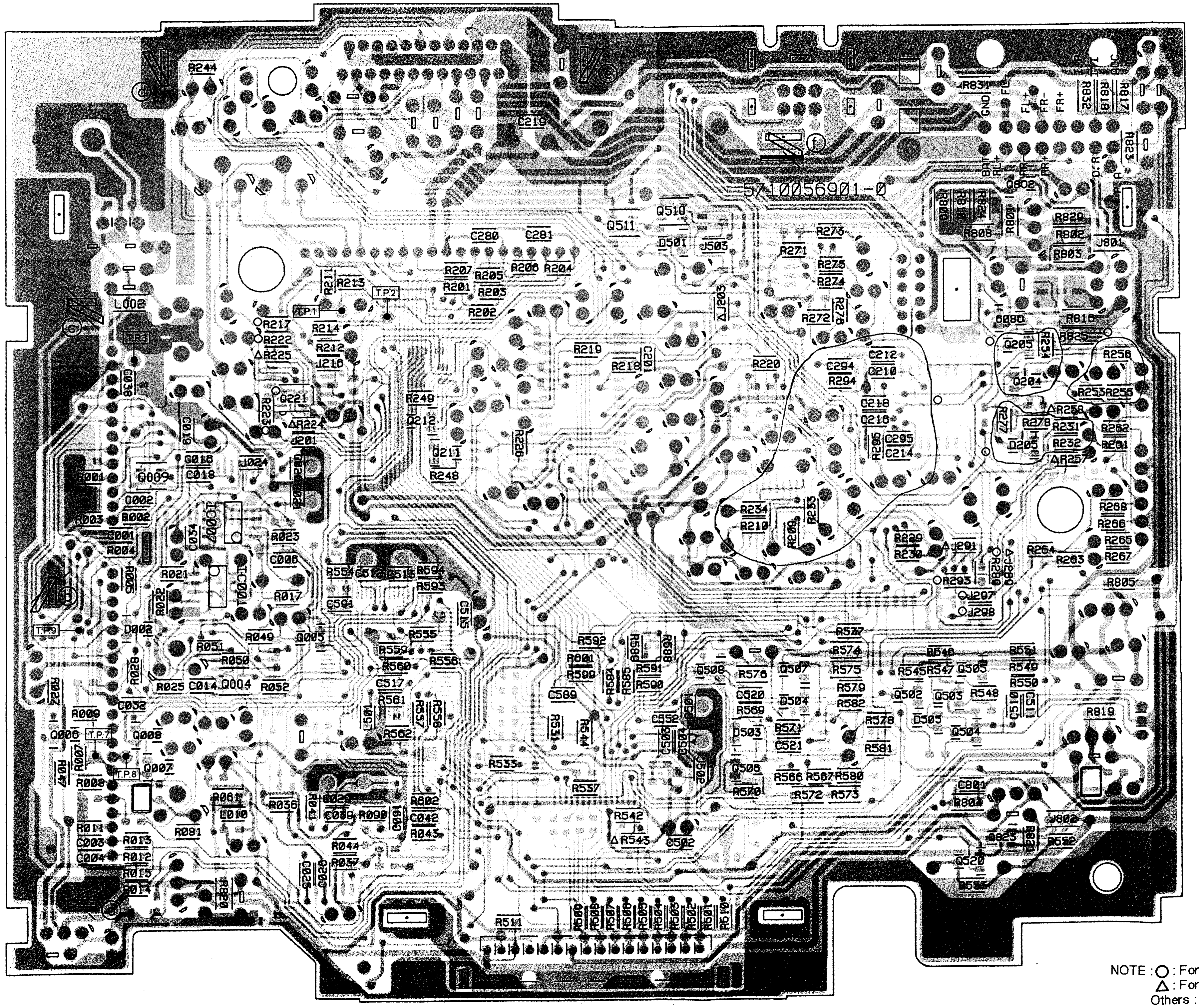
2

3

4

5

Main P.W.Board (Foil Side View)


5710056901-0
R244
C219
GND
FL+
FR-
FR+
R831
R832
R818
R817
R825
C280
C281
Q511
Q510
D501
J503
R273
R271
R207
R205
R206
R204
R201
R203
R202
R211
R213
T.P.2
T.P.1
L002
R217
R222
R225
R214
R212
J216
J203
R275
R274
R272
R270
R829
R802
J801
R803
R801
R808
Q801
Q203
R234
R256
R810
R220
C294
R294
C212
Q210
Q204
R253
R255
R219
R218
C210
R249
Q212
C211
R248
R226
Q218
Q216
R278
R231
R262
R232
R261
D205
R257
R258
R206
Q205
C214
Q221
R223
R224
J201
J024
Q009
Q010
C018
C019
C038
R001
R003
Q002
R002
C034
Q001
R004
R023
C006
R021
R005
R022
R017
R554
C513
C515
R594
R593
C516
C501
R254
R210
R209
R233
R229
R230
J291
R292
R295
J297
J298
R264
R263
R268
R266
R265
R267
R805
T.P.9
D002
R051
R050
R049
Q005
R559
R560
R555
R556
R592
R601
R599
R586
R591
R590
R598
R527
R574
R575
R546
R551
R549
R550
R545
R547
Q505
Q508
R576
Q507
C520
R569
D504
R579
R582
Q502
Q503
R548
C510
C511
R020
R025
C014
Q004
R052
C517
R561
R558
R557
R562
C589
R531
R544
C552
C506
C507
D503
R571
C521
R578
R581
D505
Q504
R819
R009
Q006
T.P.7
Q008
R007
R047
R008
T.P.8
Q007
R533
R537
Q506
R570
R566
R567
R580
R572
R573
C801
R804
R061
C010
R036
R041
C020
C030
R090
R602
C042
R043
R044
R037
R091
R011
C003
C004
R013
R012
R015
R014
R080
R542
R543
C502
J802
R803
R852
Q520
R511

NOTE : ○ : For TDA-7562R Model Only,
△ : For TDA-7560R Model Only,
Others : Common.

Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

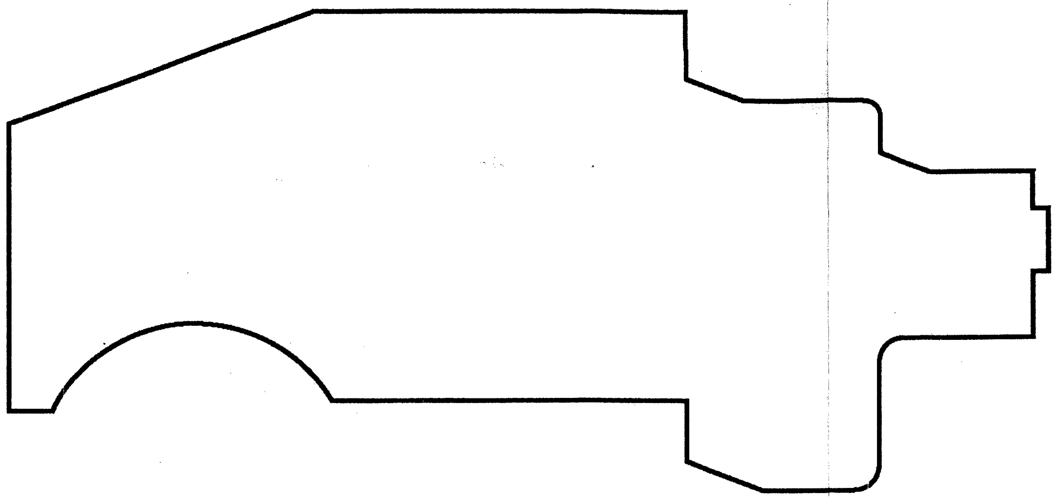
A | B | C | D | E | F | G

Parts Layout on P.W. Boards and Wiring Diagram (3/3) (Only Difference)

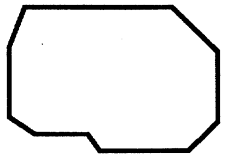
All P.W. Boards viewed from soldered side.

NOTE : For the Photo P.W.Board and Sub Motor P.W.Board, only the external frame is changed.
For the parts not mentioned, refer to the Service Manual • TDA-7659R (Part No. 68E23869S01).

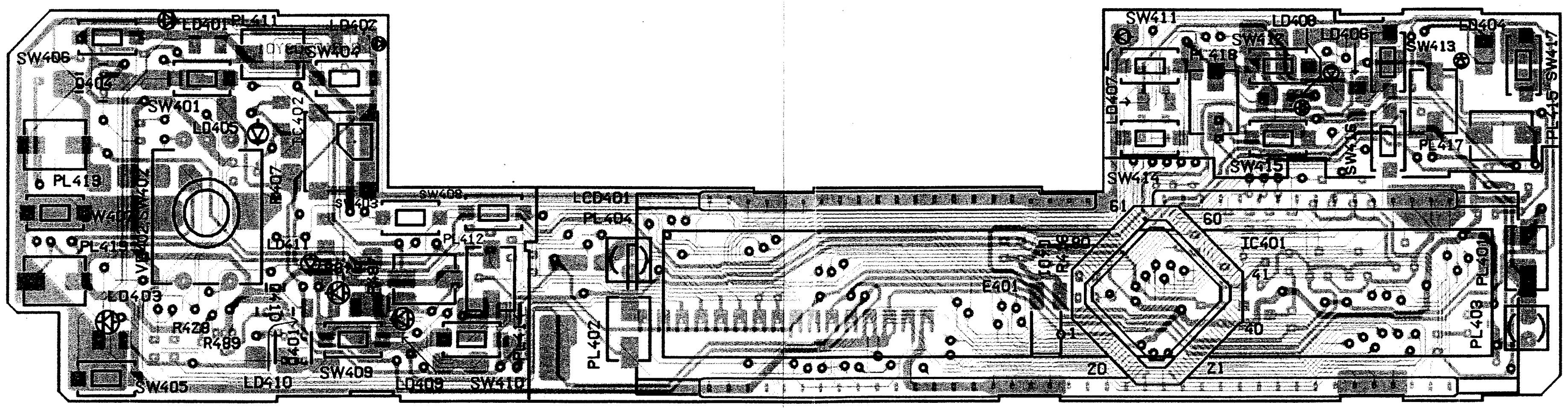
Photo P.W.Board (Foil Side View)



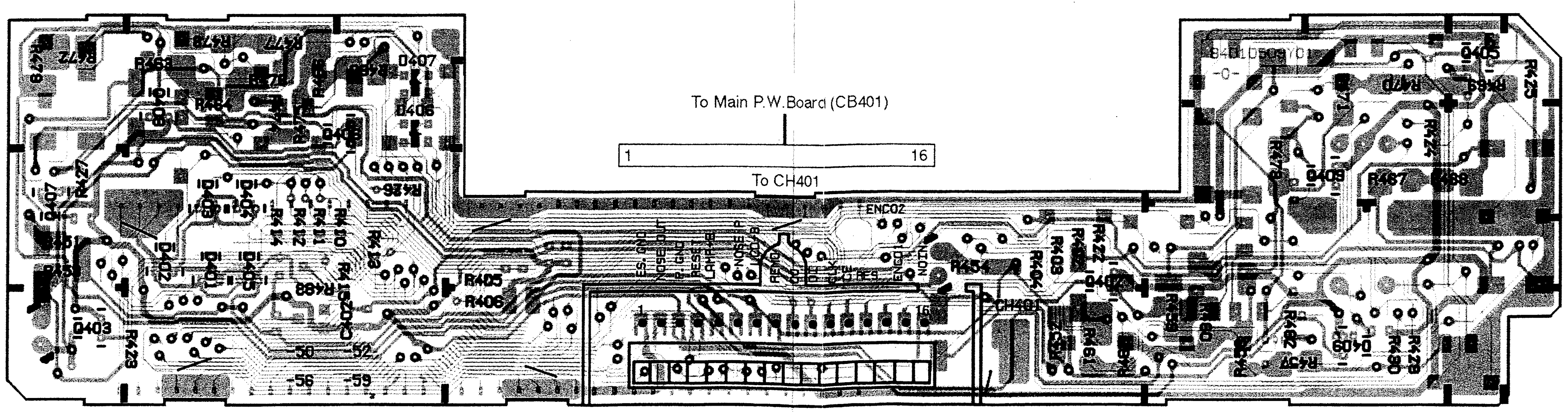
Sub Motor P.W.Board
(Foil Side View)



Front P.W.Board (Component Side View)

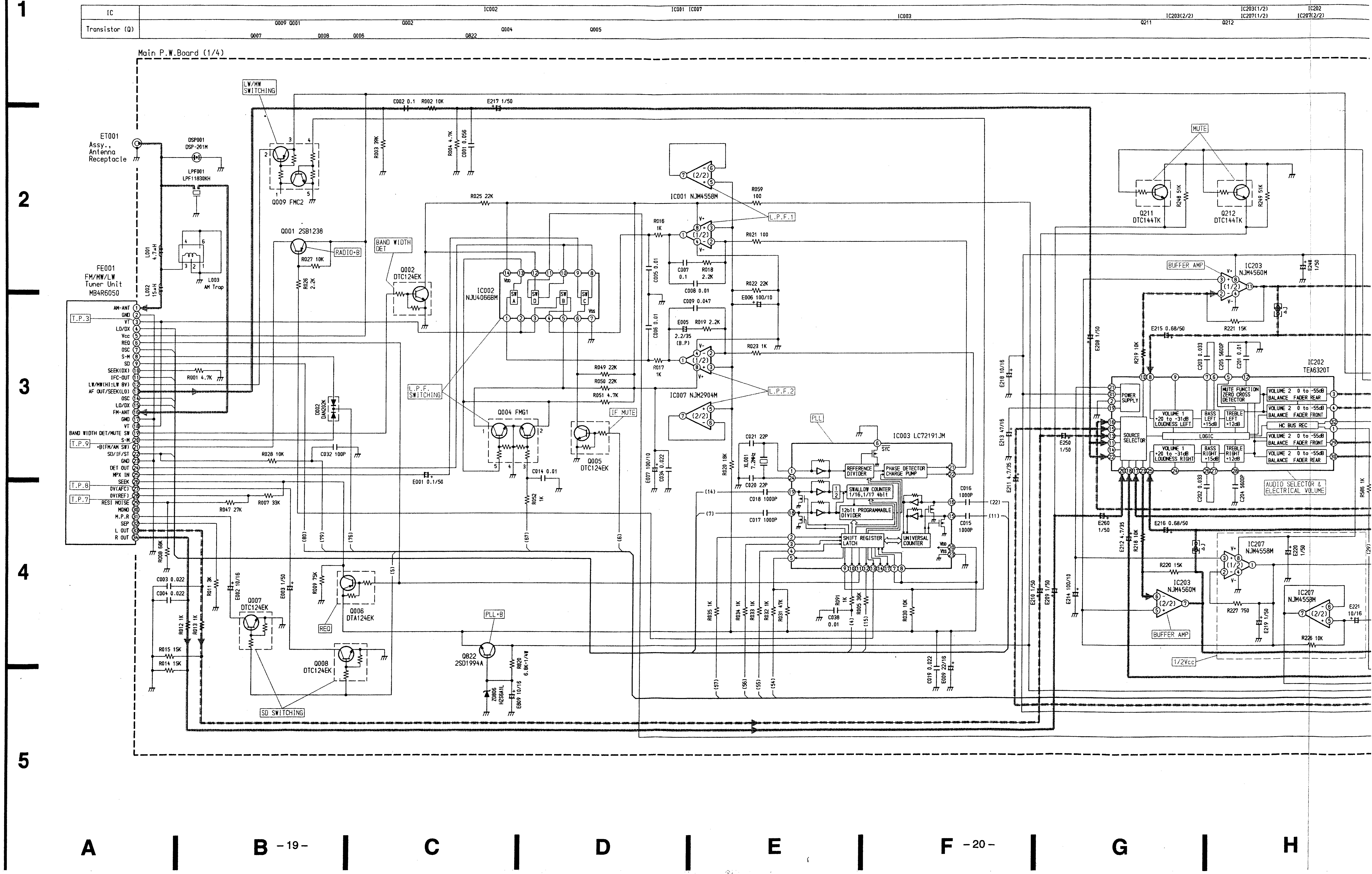


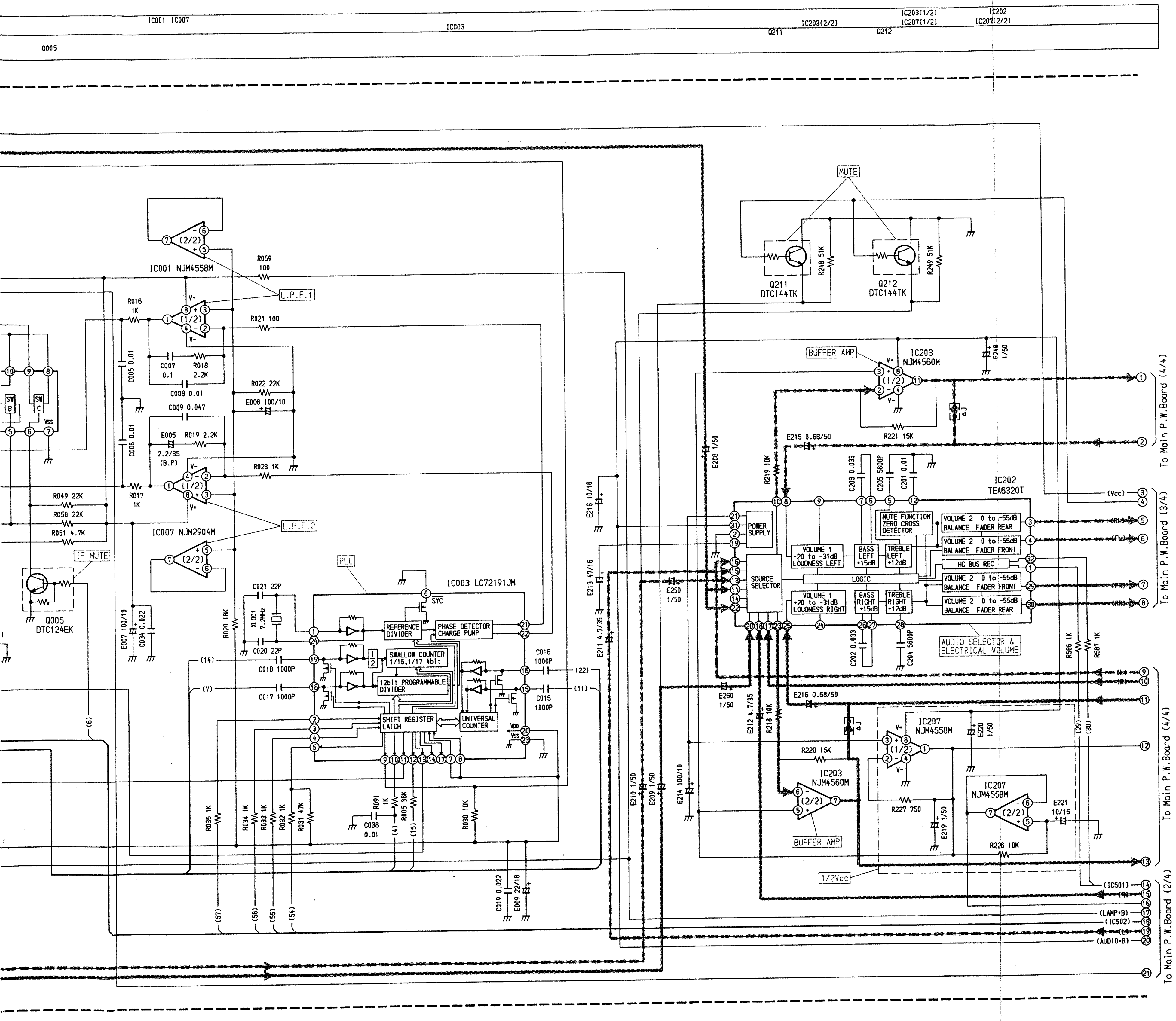
Front P.W.Board (Foil Side View)



Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Schematic Diagram (1/5)


1
2
3
4
5
A
B
C
D
E
F
G
H
IC
Transistor (Q)
IC002
IC001 IC007
IC003
IC203(2/2)
IC203(1/2)
IC207(1/2)
IC202
IC207(2/2)
Q009 Q001
Q007
Q008
Q006
Q002
Q822
Q004
Q005
Q211
Q212
Main P.W.Board (1/4)
LW/MW SWITCHING
ET001 Assy., Antenna Receptacle
DSP001 DSP-201M
LPF001 LPF11830KH
L001 4.7μH
L002 15μH
L003 AM Trap
FE001 FM/MW/LW Tuner Unit MB4R6050
AM-ANT
GND
VT
LO/DX
Vcc
REQ
OSC
S-M
SD
SEEK(DX)
IFC-OUT
LW/MW(HI:LW 8V)
AF OUT/SEEK(LO)
OSC
LO/DX
FM-ANT
GND
VT
BAND WIDTH DET/MUTE SW
S-M
+B(FM/AM SW)
SD/IF/ST
GND
DET OUT
MPX IN
SEEK
DV(AFC)
DV(REF)
REST NOISE
MONO
M.P.R
SEP
L OUT
R OUT
T.P.3
T.P.9
T.P.8
T.P.7
Q009 FMC2
Q001 2SB1238
RADIO+B
R027 10K
R026 2.2K
R003 39K
C002 0.1
R002 10K
E217 1/50
R004 4.7K
C001 0.056
BAND WIDTH DET
Q002 DTC124EK
R025 22K
IC002 NJU4066BM
L.P.F. SWITCHING
Q004 FMG1
Q005 DTC124EK
IF MUTE
R049 22K
R050 22K
R051 4.7K
C014 0.01
R052 1K
E001 0.1/50
R001 4.7K
R028 10K
C032 100P
D002 DAN202K
R047 27K
R007 33K
IC001 NJM4558M
R059 100
L.P.F.1
R016 1K
R021 100
C005 0.01
C007 0.1
R018 2.2K
C008 0.01
R022 22K
E006 100/10
C009 0.047
C006 0.01
E005 2.2/35 (B.P)
R019 2.2K
R023 1K
R017 1K
IC007 NJM2904M
L.P.F.2
PLL
IC003 LC72191JM
SYC
C021 22P
XL001 7.2MHz
C020 22P
R020 18K
E007 100/10
C034 0.022
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16,1/17 4bit
12bit PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
C018 1000P
C017 1000P
C016 1000P
C015 1000P
VDD
VSS
R035 1K
R034 1K
R033 1K
R032 1K
R031 47K
R091 1K
C038 0.01
R005 36K
R030 10K
C019 0.022
E009 22/16
R008 68K
C003 0.022
C004 0.022
R011 3K
R012 1K
R013 1K
R015 15K
R014 15K
E002 10/16
Q007 DTC124EK
E003 1/50
R009 75K
Q006 DTA124EK
REQ
Q008 DTC124EK
SD SWITCHING
PLL+B
Q822 2SD1994A
R820 6.8K-1/4W
ZD806 HZS6A1L
E809 10/16
MUTE
Q211 DTC144TK
R248 51K
Q212 DTC144TK
R249 51K
BUFFER AMP
IC203 NJM4560M
E248 1/50
R221 15K
E215 0.68/50
E208 1/50
R219 10K
C203 0.033
C205 5600P
C201 0.01
IC202 TEA6320T
E218 10/16
POWER SUPPLY
MUTE FUNCTION ZERO CROSS DETECTOR
VOLUME 2 0 to -55dB BALANCE FADER REAR
VOLUME 2 0 to -55dB BALANCE FADER FRONT
VOLUME 1 +20 to -31dB LOUDNESS LEFT
BASS LEFT ±15dB
TREBLE LEFT ±12dB
HC BUS REC
SOURCE SELECTOR
LOGIC
VOLUME 1 +20 to -31dB LOUDNESS RIGHT
BASS RIGHT ±15dB
TREBLE RIGHT ±12dB
E213 47/16
E250 1/50
E211 4.7/35
C202 0.033
C204 5600P
AUDIO SELECTOR & ELECTRICAL VOLUME
R586 1K
E260 1/50
E216 0.68/50
E212 4.7/35
R218 10K
IC207 NJM4558M
E220 1/50
R220 15K
IC203 NJM4560M
BUFFER AMP
R227 750
E219 1/50
IC207 NJM4558M
E221 10/16
R226 10K
1/2Vcc
E210 1/50
E209 1/50
E214 100/10


IC001 IC007
IC003
IC203(2/2)
IC203(1/2)
IC207(1/2)
IC202
IC207(2/2)
Q005
Q211
Q212
MUTE
Q211
DTC144TK
R248 51K
Q212
DTC144TK
R249 51K
IC001 NJM4558M
R059 100
L.P.F.1
R016 1K
R021 100
C005 0.01
C007 0.1
R018 2.2K
C008 0.01
R022 22K
E006 100/10
C009 0.047
C006 0.01
E005 2.2/35 (B.P)
R019 2.2K
R023 1K
R049 22K
R017 1K
R050 22K
R051 4.7K
L.P.F.2
IC007 NJM2904M
IF MUTE
Q005
DTC124EK
PLL
IC003 LC72191JM
SYC
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16,1/17 4bit
12bit PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
C021 22P
XL001 7.2MHz
C020 22P
C018 1000P
C017 1000P
C016 1000P
C015 1000P
R020 18K
E007 100/10
C034 0.022
R035 1K
R034 1K
R033 1K
R032 1K
R031 47K
R091 1K
R005 39K
C038 0.01
R030 10K
C019 0.022
E009 22/16
E208 1/50
E218 10/16
E213 47/16
E211 4.7/35
E250 1/50
E260 1/50
E210 1/50
E209 1/50
E214 100/10
BUFFER AMP
IC203 NJM4560M
E248 1/50
E215 0.68/50
R221 15K
R219 10K
C203 0.033
C205 5600P
C201 0.01
IC202 TEA6320T
POWER SUPPLY
SOURCE SELECTOR
MUTE FUNCTION ZERO CROSS DETECTOR
VOLUME 1 +20 to -31dB LOUDNESS LEFT
BASS LEFT +15dB
TREBLE LEFT +12dB
VOLUME 1 +20 to -31dB LOUDNESS RIGHT
BASS RIGHT +15dB
TREBLE RIGHT +12dB
LOGIC
VOLUME 2 0 to -55dB BALANCE FADER REAR
VOLUME 2 0 to -55dB BALANCE FADER FRONT
HC BUS REC
C202 0.033
C204 5600P
AUDIO SELECTOR & ELECTRICAL VOLUME
R586 1K
R587 1K
E216 0.68/50
E212 4.7/35
R218 10K
IC207 NJM4558M
E220 1/50
R220 15K
IC203 NJM4560M
R227 750
E219 1/50
IC207 NJM4558M
E221 10/16
R226 10K
BUFFER AMP
1/2Vcc
(Vcc)
(RL)
(FL)
(FR)
(RR)
(L)
(R)
(IC501)
(LAMP+B)
(IC502)
(AUDIO+B)
To Main P.W.Board (4/4)
To Main P.W.Board (3/4)
To Main P.W.Board (4/4)
To Main P.W.Board (2/4)

IC001

1	4.1V
2, 3	2.6V
4	0V
5~7	2.6V
8	13V

IC002

1	6.4V
2~4	4.1V
5	4.4V
6	9.3V
7	0V
8~11	3.3V
12	13V
13	0V
14	13V

IC003

1	1.4V	15, 16	0V
2~4	0V	17	NC
5	4.8V	18	2.7V
6	0V	19	2.4V
7, 8	4.8V	20	4.8V
9~11	0V	21, 22	2.6V
12	4.8V	23	0V
13	0V	24	2.5V
14	NC		

IC007

1	6.8V
2, 3	2.6V
4	0V
5~7	2.6V
8	14V

IC202

1	5V	16~18	4.8V
2~8	4.8V	19	9V
9	NC	20	4.8V
10, 11	4.8V	21~23	4.3V
12	9V	24	NC
13	4.6V	25~30	4.3V
14	NC	31	9V
15	4.6V	32	5.6V

IC203, 207

1~3	4.3V
4	0V
5~7	4.3V
8	8.7V

	E	C	B
Q001	8.6V	8.6V	8V
Q002	0V	13V	0V
Q005	0V	13V	0V
Q006	4.8V	4.8V	0V
Q007	0V	0V	5V
Q008	0V	0V	5V
Q211	0V	0V	13V
Q212	0V	0V	13V
Q822	4.8V	14V	5.4V

	1	2	3	4	5
Q004	13V	0V	5V	0V	0V
Q009	NC	8.5V	8.5V	5V	0V

[Measuring Conditions]

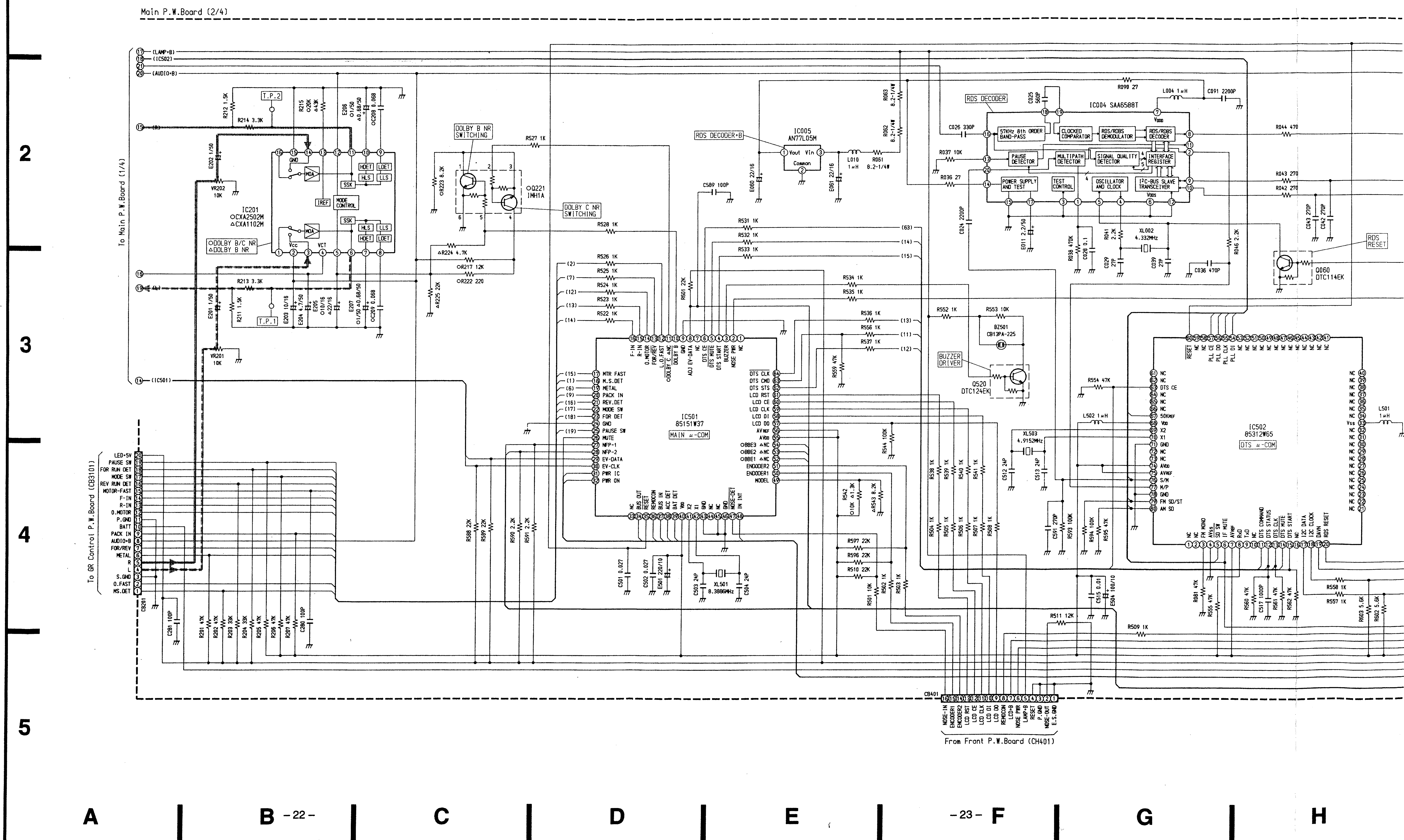
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input

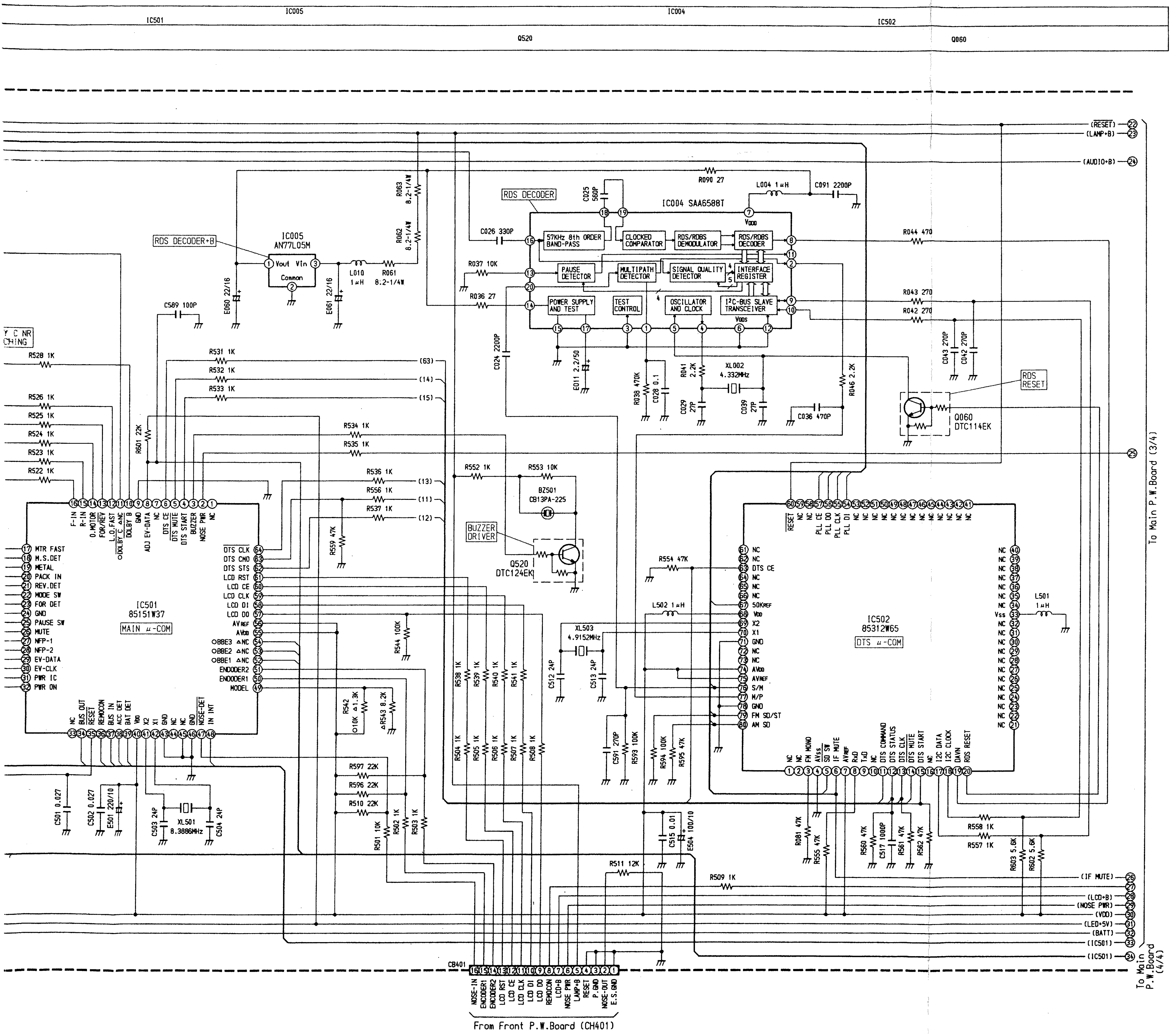
FM 98.1MHz
MW 999kHz
LW 216kHz
Tape ..... Blank

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1{,}000{,}000}$

Schematic Diagram (2/5)

IC	IC201	IC501	IC005	IC004	IC502
Transistor (Q)	Q221	Q520	Q060		


1
2
3
4
5
A
B
C
D
E
F
G
H
Main P.W.Board (2/4)
To Main P.W.Board (1/4)
(LAMP+B)
(IC502)
(AUDIO+B)
(R)
(L)
(IC501)
T.P.2
T.P.1
R212 1.5K
R214 3.3K
R215 ○20K △43K
E206 ○1/50 △0.68/50
○C208 0.068
E202 1/50
VR202 10K
VR201 10K
R213 3.3K
R211 1.5K
E201 1/50
E203 10/16
E204 4.7/50
E205 ○10/16 △22/16
E207 ○1/50 △0.68/50
○C209 0.068
IC201 ○CXA2502M △CXA1102M
○DOLBY B/C NR △DOLBY B NR
GND
MOA
HDET
LDET
HLS
LLS
SSK
IREF
MODE CONTROL
Vcc
VCT
DOLBY B NR SWITCHING
DOLBY C NR SWITCHING
○Q221 IMH1A
○R223 8.2K
△R224 4.7K
○R217 12K
○R222 220
△R225 22K
R527 1K
R528 1K
R526 1K
R525 1K
R524 1K
R523 1K
R522 1K
R601 22K
R531 1K
R532 1K
R533 1K
R534 1K
R535 1K
R536 1K
R556 1K
R537 1K
R559 47K
R544 100K
C589 100P
RDS DECODER+B
IC005 AN77L05M
Vout Vin
Common
E060 22/16
E061 22/16
L010 1μH
R061 8.2-1/4W
R063 8.2-1/4W
R062 8.2-1/4W
IC501 85151W37
MAIN μ-COM
F-IN
R-IN
O.MOTOR
FOR/REV
L.O.FAST
○DOLBY C △NC
DOLBY B
GND
ADJ EV-DATA
DTS CE
DTS MUTE
DTS START
BUZZER
NOSE PWR
NC
MTR FAST
M.S.DET
METAL
PACK IN
REV.DET
MODE SW
FOR DET
GND
PAUSE SW
MUTE
NFP-1
NFP-2
EV-DATA
EV-CLK
PWR IC
PWR ON
DTS CLK
DTS CMD
DTS STS
LCD RST
LCD CE
LCD CLK
LCD DI
LCD DO
AVREF
AVDD
○BBE3 △NC
○BBE2 △NC
○BBE1 △NC
ENCODER2
ENCODER1
MODEL
BUS OUT
RESET
REMOCON
BUS IN
ACC DET
BAT DET
VDD
X2
X1
NOSE-DET
IN INT
C501 0.027
C502 0.027
E501 220/10
C503 24P
XL501 8.3886MHz
C504 24P
R542 ○10K △1.3K
△R543 8.2K
R597 22K
R596 22K
R510 22K
R501 10K
R502 1K
R503 1K
R552 1K
R553 10K
BZ501 CB13PA-225
BUZZER DRIVER
Q520 DTC124EK
R538 1K
R539 1K
R540 1K
R541 1K
R504 1K
R505 1K
R506 1K
R507 1K
R508 1K
C512 24P
C513 24P
XL503 4.9152MHz
L502 1μH
R554 47K
C591 270P
R593 100K
R594 100K
R595 47K
C515 0.01
E504 100/10
R511 12K
R509 1K
RDS DECODER
IC004 SAA6588T
C025 560P
C026 330P
R037 10K
R036 27
R090 27
L004 1μH
C091 2200P
VDDD
VDDA
57KHz 8th ORDER BAND-PASS
CLOCKED COMPARATOR
RDS/RDBS DEMODULATOR
RDS/RDBS DECODER
PAUSE DETECTOR
MULTIPATH DETECTOR
SIGNAL QUALITY DETECTOR
INTERFACE REGISTER
POWER SUPPLY AND TEST
TEST CONTROL
OSCILLATOR AND CLOCK
I2C-BUS SLAVE TRANSCEIVER
C024 2200P
E011 2.2/50
R038 470K
C028 0.1
R041 2.2K
C029 27P
XL002 4.332MHz
C039 27P
C036 470P
R046 2.2K
R044 470
R043 270
R042 270
C043 270P
C042 270P
RDS RESET
Q060 DTC114EK
IC502 85312W65
DTS μ-COM
RESET
PLL CE
PLL DO
PLL CLK
PLL DI
DTS CE
50KREF
X2
X1
GND
AVDD
AVREF
S/M
M/P
FM SD/ST
AM SD
FM MONO
AVSS
SD SW
IF MUTE
RxD
TxD
DTS COMMAND
DTS STATUS
DTS CLK
DTS MUTE
DTS START
I2C DATA
I2C CLOCK
DAWN
RDS RESET
VSS
L501 1μH
R081 47K
R555 47K
R560 47K
C517 100P
R561 47K
R562 47K
R558 1K
R557 1K
R603 5.6K
R602 5.6K
To GR Control P.W.Board (CB3101)
CB201
LED+5V
PAUSE SW
FOR RUN DET
MODE SW
REV RUN DET
MOTOR-FAST
F-IN
R-IN
O.MOTOR
P.GND
BATT
PACK IN
AUDIO+B
FOR/REV
METAL
R
L
S.GND
O.FAST
MS.DET
C281 100P
R201 47K
R202 47K
R203 33K
R204 33K
R205 47K
R206 47K
R207 47K
C280 100P
R588 22K
R589 22K
R590 2.2K
R591 2.2K
CB401
NOSE-IN
ENCODER1
ENCODER2
LCD RST
LCD CE
LCD CLK
LCD DI
LCD DO
REMOCON
LCD+B
NOSE PWR
LAMP+B
RESET
P.GND
NOSE-OUT
E.S.GND
From Front P.W.Board (CN401)


IC501
IC005
IC004
IC502
Q520
Q060
RDS DECODER
IC004 SAA6588T
57KHz 8th ORDER BAND-PASS
CLOCKED COMPARATOR
RDS/RBDS DEMODULATOR
RDS/RBDS DECODER
PAUSE DETECTOR
MULTIPATH DETECTOR
SIGNAL QUALITY DETECTOR
INTERFACE REGISTER
POWER SUPPLY AND TEST
TEST CONTROL
OSCILLATOR AND CLOCK
I2C-BUS SLAVE TRANSCEIVER
RDS DECODER+B
IC005 AN77L05M
Vout Vin
Common
XL002 4.332MHz
RDS RESET
Q060 DTC114EK
BUZZER DRIVER
Q520 DTC124EK
BZ501 CB13PA-225
IC501 85151W37 MAIN μ-COM
IC502 85312W65 DTS μ-COM
XL503 4.9152MHz
XL501 8.3886MHz
(RESET)
(LAMP+B)
(AUDIO+B)
To Main P.W.Board (3/4)
(IF MUTE)
(LCD+B)
(NOSE PWR)
(VDD)
(LED+5V)
(BATT)
(IC501)
(IC501)
To Main P.W.Board (4/4)
CB401
From Front P.W.Board (CH401)

IC004

1~3	0V	11	NC
4	2.3V	12	0V
5	2V	13	2V
6	0V	14	4.7V
7, 8	4.8V	15	0V
9, 10	5.1V	16~20	2.4V

IC005

1	4.9V
2	0V
3	13V

IC201

1	NC	10	0V
2	8.7V	11	4.5V
3, 4	4.4V	12	8.7V
5	4V	13	1.2V
6	4.5V	14	4.4V
7	0V	15	0V
8, 9	4.5V	16	NC

IC501

1	NC			31	5.1V	PWR. IC	50, 51	0V	
2	5.1V			32	5.1V	PWR. ON	52	○	5.1V
3, 4	0V			33	NC			△	NC
5, 6	5.1V			34	0V		53	○	0V
7	NC			35	5.1V			△	NC
8	5.1V			36	5.2V		54	○	5.1V
9, 10	0V			37	0V			△	NC
11	○	5.1V		38	4.8V	ACC. DET	55, 56	5.1V	
	△	NC		39	4.8V	BAT. DET	57	4.8V	
12~17	0V			40	5.1V		58	0V	
18~23	5.1V			41, 42	2.8V		59	5.1V	
24	0V			43	0V		60	0V	
25	5.1V			44, 45	NC		61	5.1V	
26	5.1V		MUTE.	46	0V		62, 63	0V	
27	4.7V			47	2.5V		64	5.1V	
28	0V			48	0V				
29~30	5.1V			49	0.7V				

IC502

1, 2	NC		34~53	NC	
3, 4	0V		54~57	0V	
5	5.1V	$\overline{\text{SD SW}}$	58, 59	NC	
6	0V	IF. MUTE	60	5.1V	$\overline{\text{RESET}}$
7, 8	5.1V		61, 62	NC	
9	5V		63	5V	
10	NC		64~66	NC	
11, 12	0V		67	5.1V	REF
13	5V		68	5.1V	
14	5.1V	D. MUTE	69	3.1V	
15	0V		70	2.7V	
16	NC		71	0V	
17~19	5.1V		72, 73	NC	
20	5.1V	RESET	74, 75	5.1V	
21~32	NC		76, 77	3.3V	
33	0V		78~80	0V	

	E	C	B
Q060	0V	2.1V	0V
Q520	0V	14V	0V

	1	2	3	4	5	6	MODE
Q221	0V	4.8V	0V	0V	4.8V	0V	DOLBY OFF

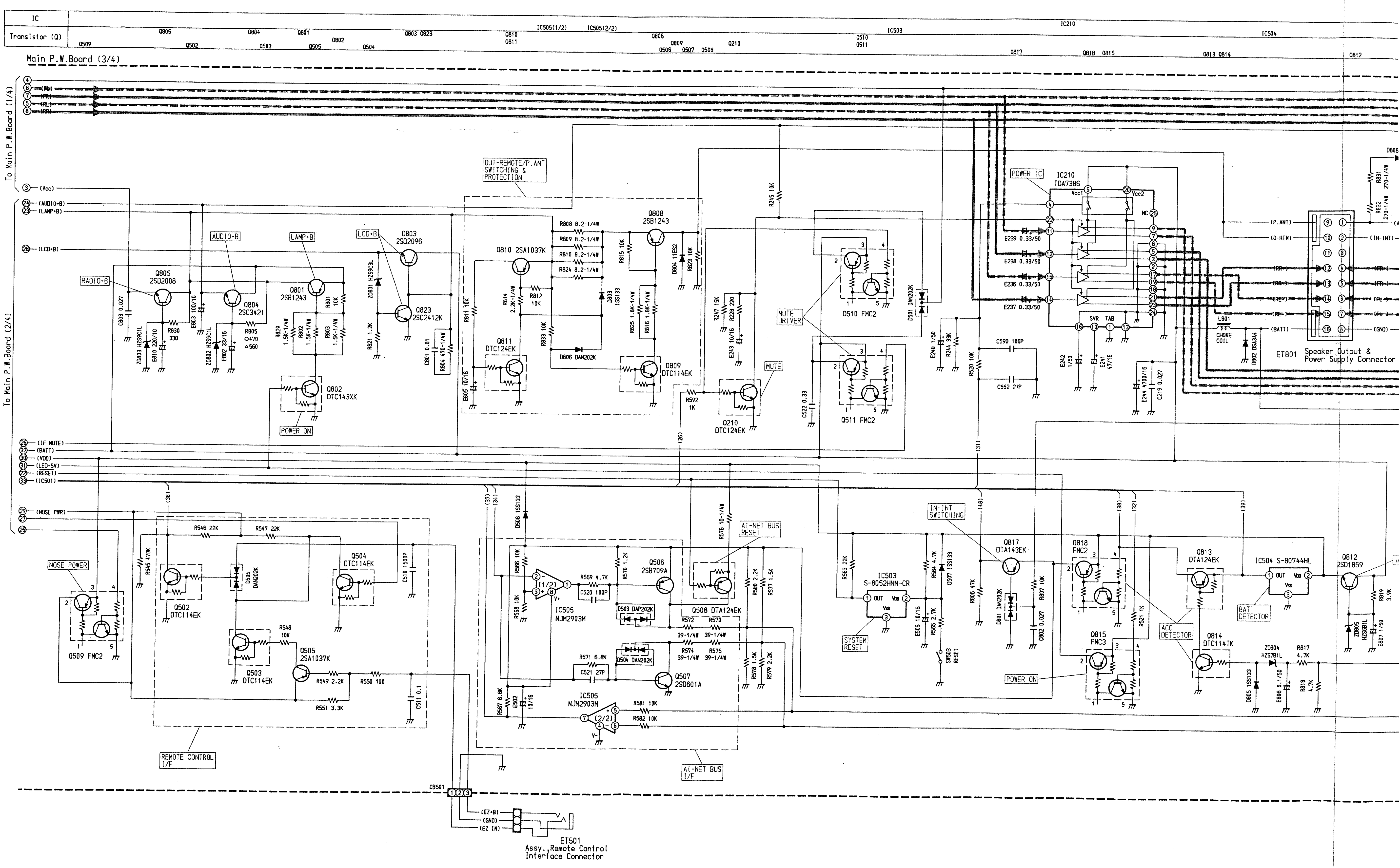
[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input
  FM 98.1MHz
  MW 999kHz
  LW 216kHz
  Tape ..... Blank

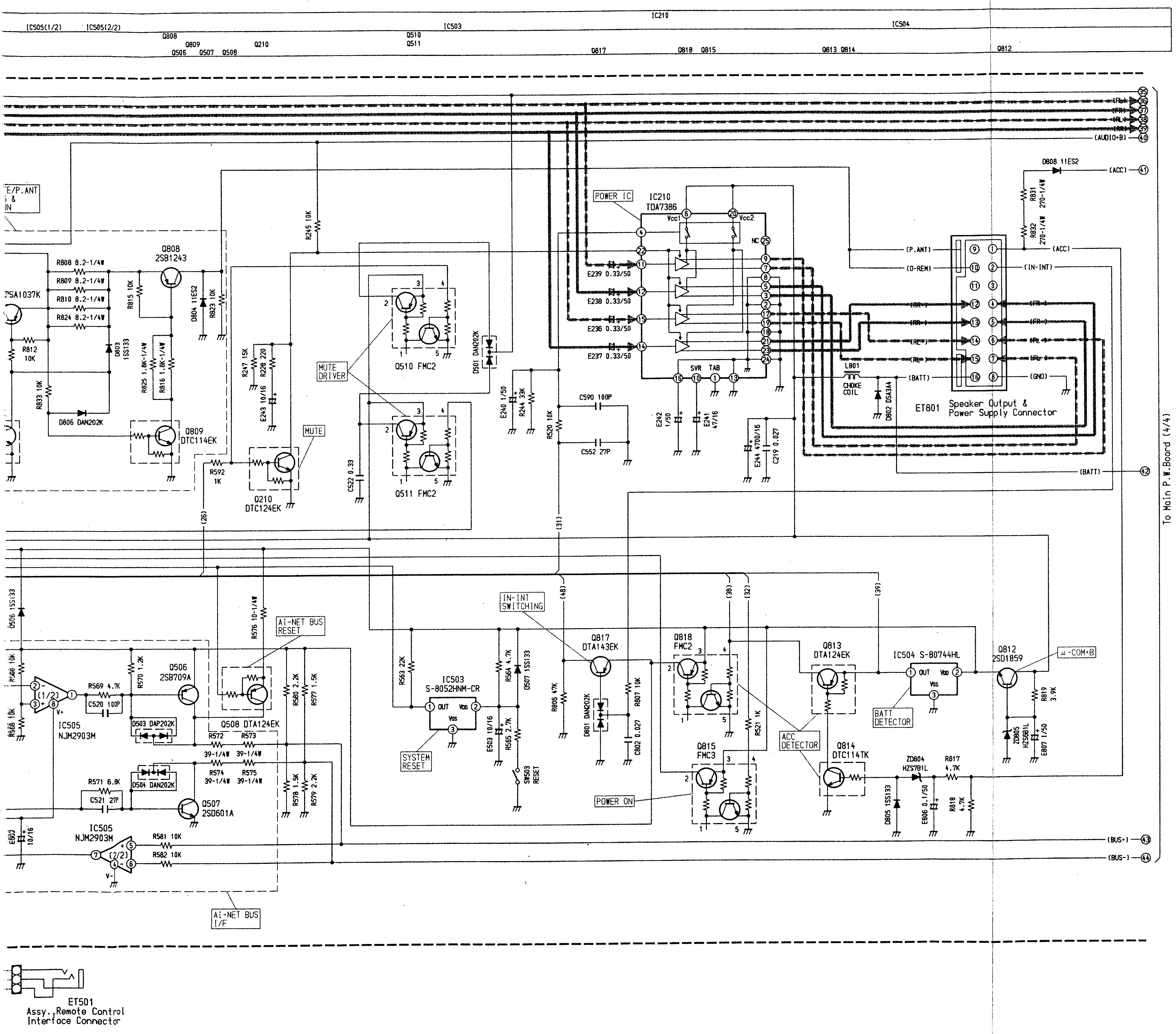
NOTE : ○ : For TDA-7562R Model Only,
△ : For TDA-7560R Model Only,
Others :Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (3/5)


IC
Transistor (Q)
Q509 Q805 Q502 Q804 Q503 Q801 Q505 Q802 Q504 Q803 Q823 Q810 Q811 IC505(1/2) IC505(2/2) Q808 Q809 Q506 Q507 Q508 Q210 Q510 Q511 IC503 Q817 IC210 Q818 Q815 Q813 Q814 IC504 Q812
Main P.W.Board (3/4)
To Main P.W.Board (1/4)
To Main P.W.Board (2/4)
(Vcc)
(AUDIO+B)
(LAMP+B)
(LCD+B)
(IF MUTE)
(BATT)
(VDD)
(LED+SV)
(RESET)
(IC501)
(NOSE PWR)
RADIO+B
AUDIO+B
LAMP+B
LCD+B
Q805 2SD2008
Q804 2SC3421
Q801 2SB1243
Q802 DTC143XK
POWER ON
Q803 2SD2096
Q823 2SC2412K
ZD801 HZS9C3L
OUT-REMOTE/P.ANT SWITCHING & PROTECTION
Q810 2SA1037K
Q811 DTC124EK
Q808 2SB1243
Q809 DTC114EK
D806 DAN202K
D803 1SS133
D804 11ES2
R808 8.2-1/4W
R809 8.2-1/4W
R810 8.2-1/4W
R824 8.2-1/4W
MUTE DRIVER
MUTE
Q210 DTC124EK
Q510 FMC2
Q511 FMC2
D501 DAN202K
POWER IC
IC210 TDA7386
Vcc1 Vcc2 NC
SVR TAB
E239 0.33/50
E238 0.33/50
E236 0.33/50
E237 0.33/50
LB801 CHOKE COIL
D802 DSA3A4
C590 100P
C552 27P
E244 4700/16
C219 0.027
(P.ANT)
(O-REM)
(IN-INT)
(RR+) (RR-) (RL+) (RL-)
(FR+) (FR-) (FL+) (FL-)
(BATT)
(GND)
ET801 Speaker Output & Power Supply Connector
NOSE POWER
Q509 FMC2
REMOTE CONTROL I/F
Q502 DTC114EK
D505 DAN202K
Q504 DTC114EK
Q503 DTC114EK
Q505 2SA1037K
R546 22K
R547 22K
R548 10K
R549 2.2K
R550 100
R551 3.3K
C510 1500P
C511 0.1
IC505 NJM2903M
(1/2)
(2/2)
R569 4.7K
C520 100P
Q506 2SB709A
D503 DAP202K
D504 DAN202K
Q508 DTA124EK
Q507 2SD601A
R571 6.8K
C521 27P
R572 39-1/4W
R573 39-1/4W
R574 39-1/4W
R575 39-1/4W
R581 10K
R582 10K
Ai-NET BUS RESET
Ai-NET BUS I/F
R576 10-1/4W
IN-INT SWITCHING
IC503 S-8052HNM-CR
SYSTEM RESET
SW503 RESET
Q817 DTA143EK
D801 DAN202K
Q818 FMC2
Q815 FMC3
POWER ON
Q813 DTA124EK
ACC DETECTOR
Q814 DTC114TK
IC504 S-80744HL
BATT DETECTOR
Q812 2SD1659
ZD804 HZS7B1L
R817 4.7K
R818 4.7K
ZD805 HZS6B1L
CB501
(EZ+B)
(GND)
(EZ IN)
ET501 Assy. Remote Control Interface Connector

1
2
3
4
5
A
B
C
D
E
F
G
H


IC505(1/2)
IC505(2/2)
Q808
Q809
Q506 Q507 Q508
Q210
IC503
Q510
Q511
Q817
IC210
Q818 Q815
IC504
Q813 Q814
Q812
POWER IC
IC210
TDA7386
Vcc1
Vcc2
E239 0.33/50
E238 0.33/50
E236 0.33/50
E237 0.33/50
SVR TAB
(FL+)
(FR+)
(RL+)
(RR+)
(AUDIO+B)
(ACC)
D808 11ES2
R831 270-1/4W
R832 270-1/4W
(P.ANT)
(O-REM)
(IN-INT)
(GND)
(BATT)
L801 CHOKE COIL
D802 DSA3A4
ET801 Speaker Output & Power Supply Connector
E244 4700/16
C219 0.027
E242 1/50
E241 47/16
C590 100P
C552 27P
R520 10K
E240 1/50
R244 33K
D501 DAN202K
Q510 FMC2
Q511 FMC2
MUTE DRIVER
MUTE
Q210 DTC124EK
R592 1K
C522 0.33
R245 10K
R247 15K
R220 220
E243 10/16
Q808 2SB1243
R808 8.2-1/4W
R809 8.2-1/4W
R810 8.2-1/4W
R824 8.2-1/4W
R815 10K
D804 11ES2
R823 10K
R812 10K
R833 10K
D803 1SS133
R825 1.8K-1/4W
R816 1.8K-1/4W
D806 DAN202K
Q809 DTC114EK
2SA1037K
E/P.ANT
To Main P.W.Board (4/4)
D506 1SS133
R566 10K
R568 10K
IC505 NJM2903M
R569 4.7K
C520 100P
R570 1.2K
Q506 2SB709A
D503 DAP202K
Q508 DTA124EK
Ai-NET BUS RESET
R576 10-1/4W
R572 R573 39-1/4W 39-1/4W
R574 R575 39-1/4W 39-1/4W
R580 2.2K
R577 1.5K
R578 1.5K
R579 2.2K
R571 6.8K
C521 27P
D504 DAN202K
Q507 2SD601A
E502 10/16
IC505 NJM2903M
R581 10K
R582 10K
Ai-NET BUS I/F
R563 22K
IC503 S-8052HNM-CR
SYSTEM RESET
R564 4.7K
D507 1SS133
E503 10/16
R565 2.7K
SW503 RESET
IN-INT SWITCHING
Q817 DTA143EK
R805 47K
D801 DAN202K
R807 10K
C802 0.027
Q818 FMC2
Q815 FMC3
POWER ON
R521 1K
ACC DETECTOR
Q813 DTA124EK
IC504 S-80744HL
BATT DETECTOR
Q814 DTC114TK
ZD804 HZS7B1L
R817 4.7K
D805 1SS133
E806 0.1/50
R818 4.7K
Q812 2SD1859
μ-COM+B
R819 3.9K
ZD805 HZS6B1L
E807 1/50
(BUS+)
(BUS-)
ET501 Assy.,Remote Control Interface Connector

IC210

1, 2	0V	14~17	7.1V
3	7.1V	18	0V
4	3.9V	19	7.1V
5	7.1V	20	14V
6	14V	21	7.1V
7	7.1V	22	0V
8	0V	23	7.1V
9~12	7.1V	24	0V
13	0V	25	NC

IC503

1, 2	5.1V
3	0V

IC504

1	4.8V
2	5.1V
3	0V

IC505

1	5V
2	0V
3	2.5V
4	0V
5	2V
6	3V
7	0V
8	5V

	E	C	B		E	C	B
Q210	0V	5.2V	0V	Q804	8.6V	14V	9.3V
Q502	0V	4.2V	0V	Q805	8.8V	0V	9.4V
Q503	0V	0V	0V	Q808	14V	14V	13V
Q504	0V	0V	1.2V	Q809	0V	14V	0V
Q505	5.1V	0V	5.1V	Q810	14V	0V	14V
Q506	5.1V	2V	5.1V	Q811	0V	0V	9V
Q507	0V	3V	0V	Q812	5.1V	14V	5.7V
Q508	5.2V	2V	5.2V	Q813	4.8V	4.7V	0V
Q801	14V	14V	13V	Q814	0V	0V	4.8V
Q802	0V	0V	5.1V	Q817	5V	0V	5V
Q803	10V	14V	11V	Q823	0V	11V	0V

	1	2	3	4	5
Q509	NC	5.2V	5.1V	4.9V	0V
Q510	NC	14V	14V	4.7V	0V
Q511	NC	13V	14V	0V	0V
Q815	NC	5.1V	5V	4.7V	0V
Q818	NC	5V	5.1V	4.8V	0V

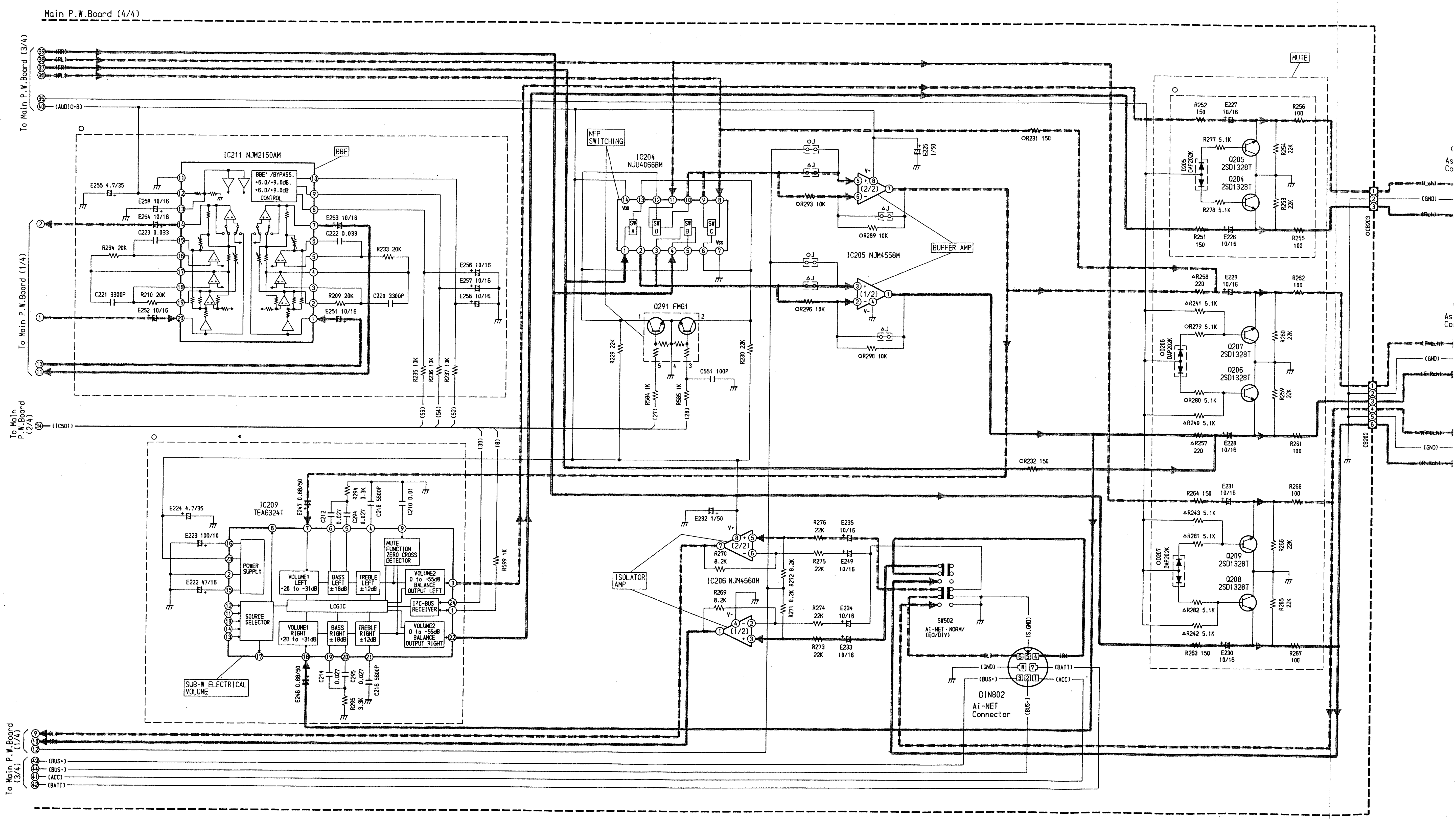
[Measuring Conditions]

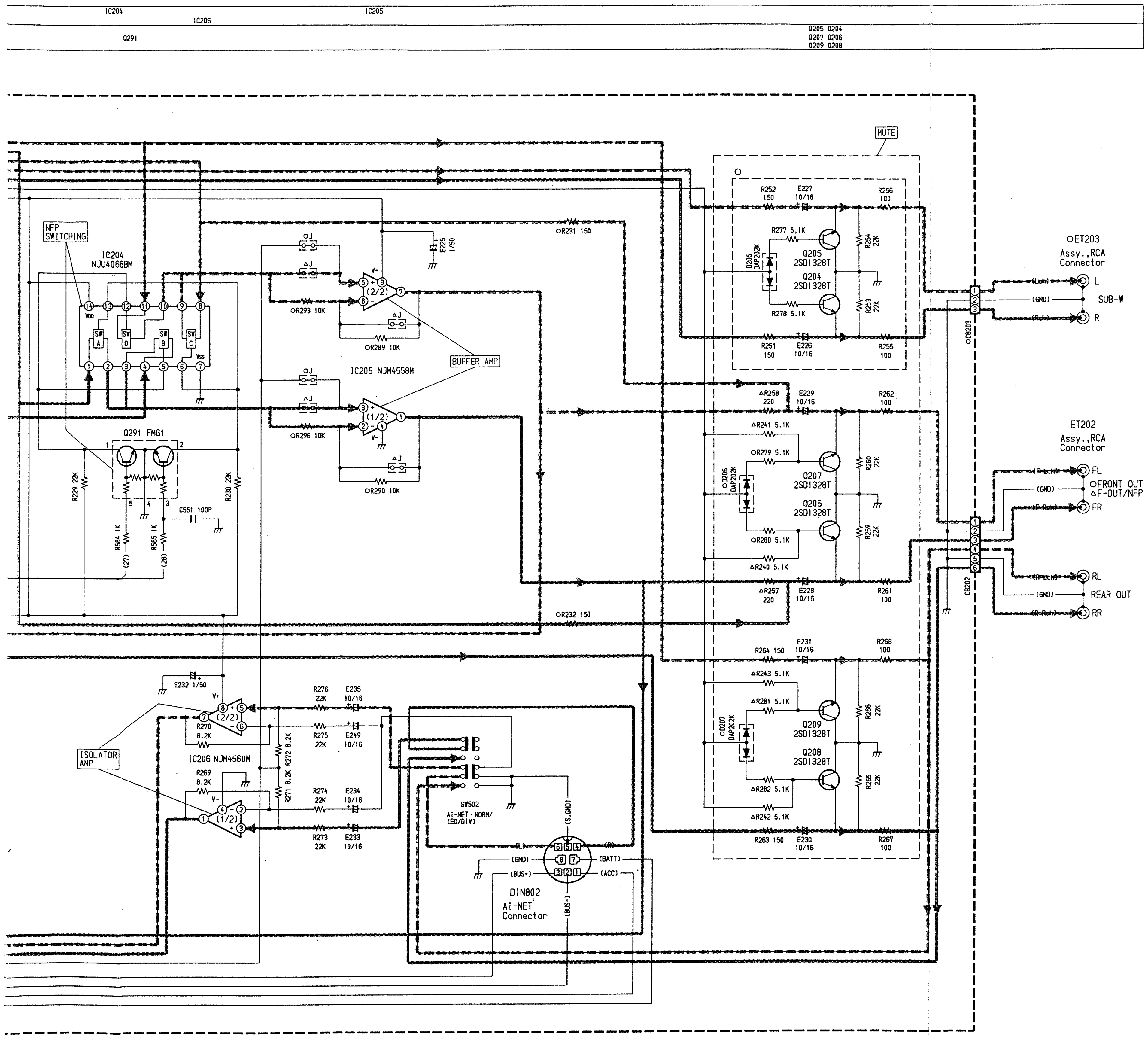
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input
  - FM 98.1MHz
  - MW 999kHz
  - LW 216kHz
  - Tape ..... Blank

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1,000,000}$

Schematic Diagram (4/5)

IC	IC211 IC209 IC204 IC206 IC205
Transistor (Q)	Q291 Q205 Q204 Q207 Q206 Q209 Q208


Main P.W.Board (4/4)
To Main P.W.Board (3/4)
(RR)
(RL)
(FR)
(FL)
(AUDIO+B)
To Main P.W.Board (1/4)
To Main P.W.Board (2/4)
(IC501)
To Main P.W.Board (1/4)
(L)
(R)
To Main P.W.Board (3/4)
(BUS+)
(BUS-)
(ACC)
(BATT)
IC211 NJM2150AM
BBE
BBE* /BYPASS. •6.0/+9.0dB. •6.0/+9.0dB CONTROL
E255 4.7/35
E259 10/16
E254 10/16
C223 0.033
R234 20K
C221 3300P
R210 20K
E252 10/16
E253 10/16
C222 0.033
R233 20K
R209 20K
C220 3300P
E251 10/16
E256 10/16
E257 10/16
E258 10/16
R235 10K
R236 10K
R237 10K
(53)
(54)
(52)
NFP SWITCHING
IC204 NJU4066BM
Vdd
Vss
SW A
SW D
SW B
SW C
Q291 FMG1
R229 22K
R230 22K
R584 1K
R585 1K
(27)
(28)
C551 100P
(30)
(8)
IC205 NJM4558M
E225 1/50
OR231 150
OR293 10K
OR289 10K
OR296 10K
OR290 10K
BUFFER AMP
OR232 150
MUTE
R252 150
E227 10/16
R256 100
R277 5.1K
D205 DAP202K
Q205 2SD1328T
Q204 2SD1328T
R254 22K
R253 22K
R278 5.1K
R251 150
E226 10/16
R255 100
R258 220
E229 10/16
R262 100
R241 5.1K
R279 5.1K
D206 DAP202K
Q207 2SD1328T
Q206 2SD1328T
R260 22K
R259 22K
R280 5.1K
R240 5.1K
R257 220
E228 10/16
R261 100
R264 150
E231 10/16
R268 100
R243 5.1K
R281 5.1K
D207 DAP202K
Q209 2SD1328T
Q208 2SD1328T
R266 22K
R265 22K
R282 5.1K
R242 5.1K
R263 150
E230 10/16
R267 100
CB203
CB202
(L-ch)
(GND)
(R-ch)
(F-Lch)
(F-Rch)
(R-Lch)
(R-Rch)
IC209 TEA6324T
E224 4.7/35
E223 100/10
E222 47/16
POWER SUPPLY
SOURCE SELECTOR
VOLUME1 LEFT +20 to -31dB
BASS LEFT ±18dB
TREBLE LEFT ±12dB
VOLUME2 0 to -55dB BALANCE OUTPUT LEFT
MUTE FUNCTION ZERO CROSS DETECTOR
LOGIC
I²C-BUS RECEIVER
VOLUME1 RIGHT +20 to -31dB
BASS RIGHT ±18dB
TREBLE RIGHT ±12dB
VOLUME2 0 to -55dB BALANCE OUTPUT RIGHT
E247 0.68/50
C212 0.027
C294 0.027
R294 3.3K
C218 5600P
C210 0.01
E246 0.68/50
C214 0.027
C295 0.027
R295 3.3K
C216 5600P
R599 1K
SUB-W ELECTRICAL VOLUME
E232 1/50
ISOLATOR AMP
IC206 NJM4560M
R270 8.2K
R269 8.2K
R272 8.2K
R271 8.2K
R276 22K
E235 10/16
R275 22K
E249 10/16
R274 22K
E234 10/16
R273 22K
E233 10/16
SW502 Ai-NET • NORM/ (EQ/DIV)
DIN802 Ai-NET Connector
(S.GND)
(GND)
(BUS+)
(BATT)
(ACC)
(BUS-)
1
2
3
4
5
A
B
C
D
E
F
G
H


IC204
IC206
IC205
Q291
Q205 Q204
Q207 Q206
Q209 Q208
NFP SWITCHING
IC204 NJU4066BM
Q291 FMG1
R229 22K
R230 22K
R584 1K
R585 1K
C551 100P
(27)
(28)
IC205 NJM4558M
BUFFER AMP
OR293 10K
OR289 10K
OR296 10K
OR290 10K
OR231 150
OR232 150
E225 1/50
MUTE
R252 150
E227 10/16
R256 100
R277 5.1K
Q205 2SD1328T
Q204 2SD1328T
R278 5.1K
D205 DAP202K
R254 22K
R253 22K
R251 150
E226 10/16
R255 100
ΔR258 220
E229 10/16
R262 100
ΔR241 5.1K
OR279 5.1K
Q207 2SD1328T
Q206 2SD1328T
OD206 DAP202K
R260 22K
R259 22K
OR280 5.1K
ΔR240 5.1K
ΔR257 220
E228 10/16
R261 100
R264 150
E231 10/16
R268 100
ΔR243 5.1K
ΔR281 5.1K
Q209 2SD1328T
Q208 2SD1328T
OD207 DAP202K
R266 22K
R265 22K
ΔR282 5.1K
ΔR242 5.1K
R263 150
E230 10/16
R267 100
OET203 Assy.,RCA Connector
L
SUB-W
R
(Lch)
(GND)
(Rch)
OCB203
ET202 Assy.,RCA Connector
FL
OFRONT OUT
ΔF-OUT/NFP
FR
(F-Lch)
(F-Rch)
RL
REAR OUT
RR
(R-Lch)
(R-Rch)
CB202
E232 1/50
ISOLATOR AMP
IC206 NJM4560M
R270 8.2K
R269 8.2K
R272 8.2K
R271 8.2K
R276 22K
E235 10/16
R275 22K
E249 10/16
R274 22K
E234 10/16
R273 22K
E233 10/16
SW502 Ai-NET·NORM/ (EQ/DIV)
DIN802 Ai-NET Connector
(S.GND)
(L)
(R)
(GND)
(BATT)
(BUS+)
(ACC)
(BUS-)
V+
V-
Vdd
Vss

IC204

1~4	4.3V
5	0V
6	8.7V
7	0V
8~11	4.3V
12	0V
13, 14	8.7V

IC205, 206

1~3	4.3V
4	0V
5~7	4.3V
8	8.7V

○ IC209

1	5V	15, 16	4.3V
2	0V	17	NC
3~7	4.3V	18~22	4.3V
8	NC	23	8.7V
9	4.3V	24	5V
10~14	NC		

○ IC211

1~7	4.3V
8	0V
9, 10	4.7V
11	0V
12	8.6V
13, 14	4.3V
15	0V
16	4.3V
17	0V
18~20	4.3V

	E	C	B
Q204	0V	0V	0.7V
Q205	0V	0V	0.7V
Q206	0V	0V	0.7V
Q207	0V	0V	0.7V
Q208	0V	0V	0.7V
Q209	0V	0V	0.7V

	1	2	3	4	5
Q291	0V	8.7V	0V	0V	4.5V

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : No Signal Input
  FM 98.1MHz
  MW 999kHz
  LW 216kHz
  Tape ..... Blank

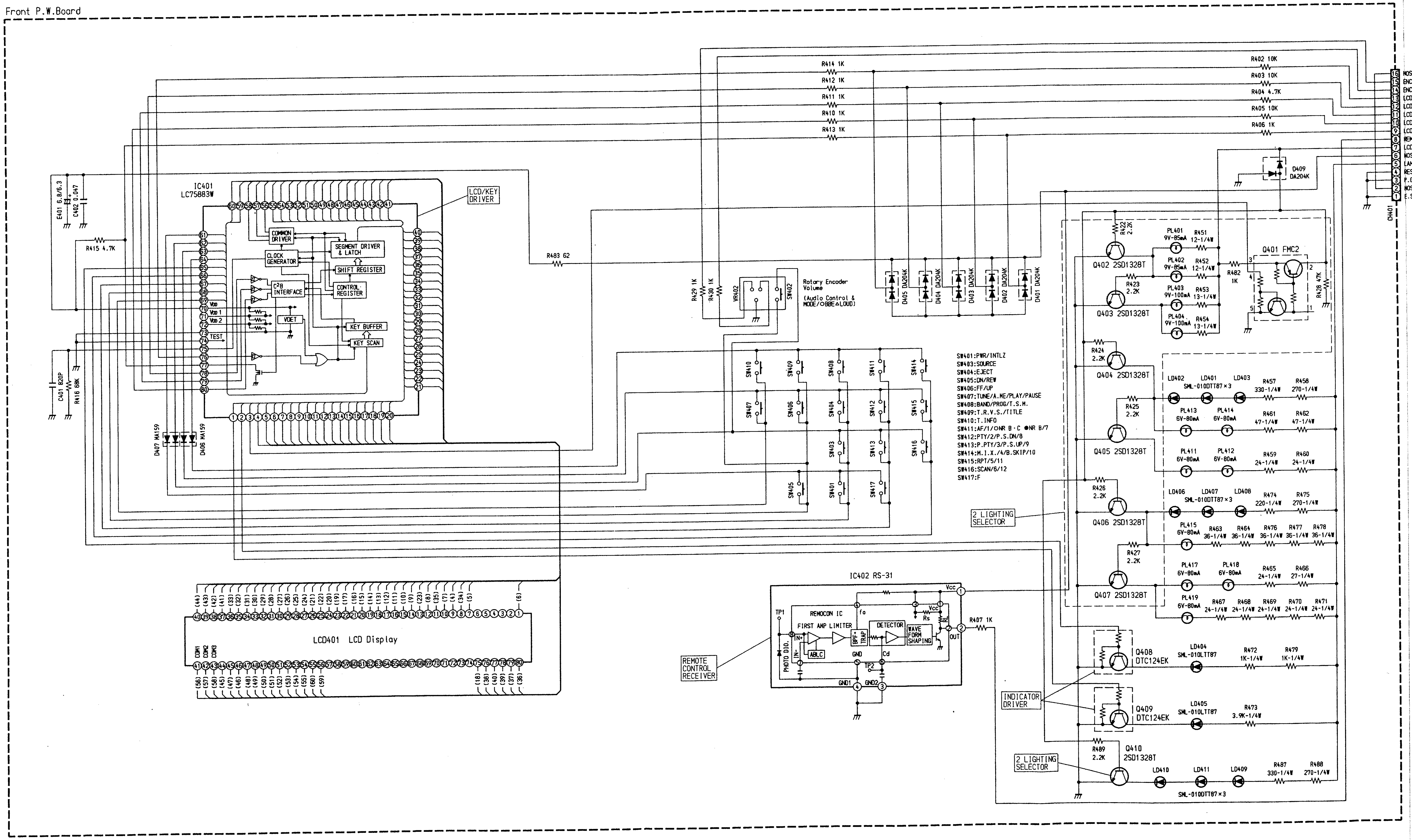
NOTE : ○ : For TDA-7562R Model Only,
△ : For TDA-7560R Model Only,
Others :Common.

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

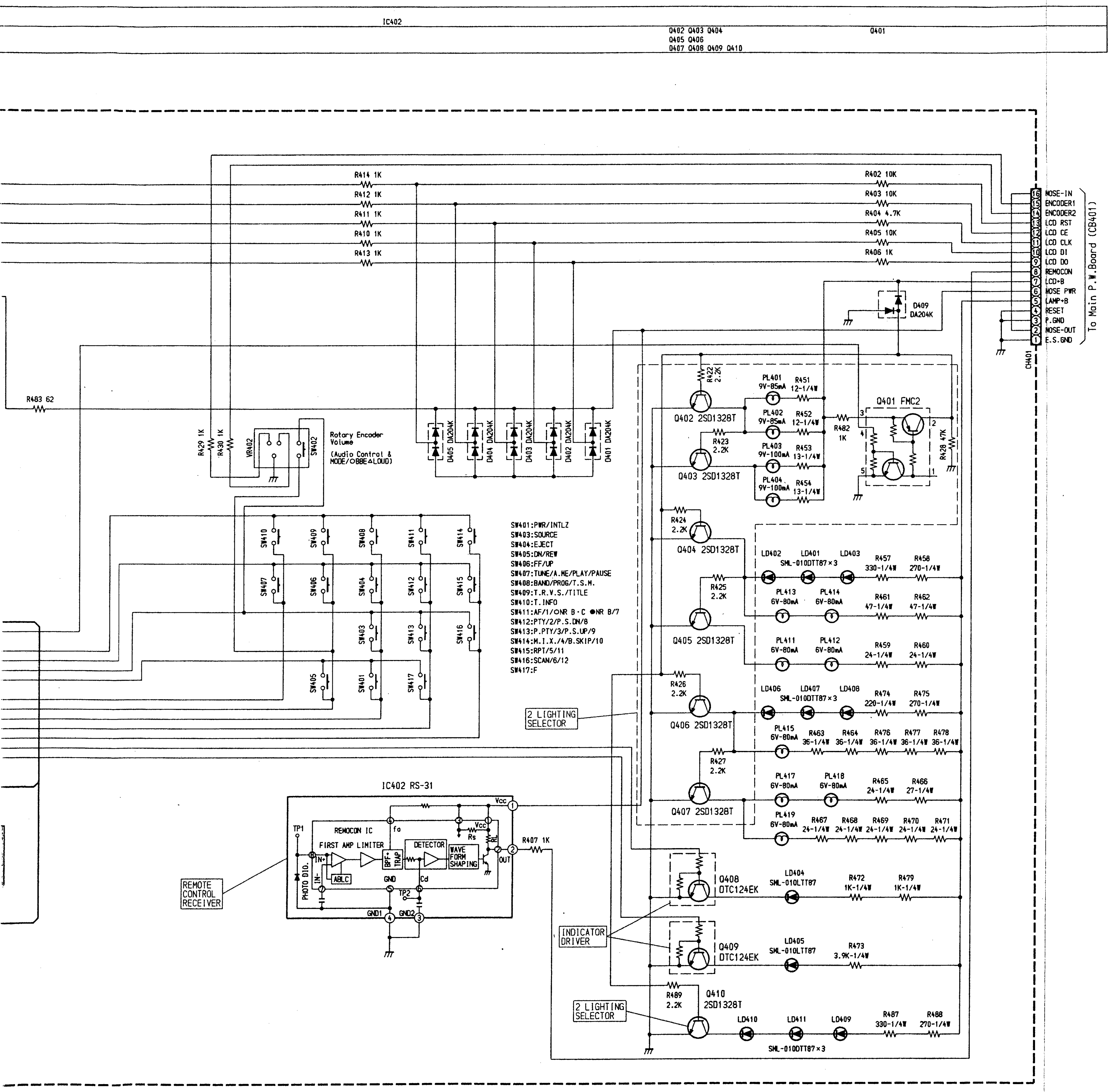
Schematic Diagram (5/5)

IC	IC401	IC402		
Transistor (Q)			Q402 Q403 Q404 Q405 Q406 Q407 Q408 Q409 Q410	Q401

1
2
3
4
5



Front P.W.Board
IC401
LC75883W
LCD/KEY DRIVER
COMMON DRIVER
CLOCK GENERATOR
SEGMENT DRIVER & LATCH
SHIFT REGISTER
C²B INTERFACE
CONTROL REGISTER
VDET
KEY BUFFER
KEY SCAN
VDD
VDD 1
VDD 2
TEST
E401 6.8/6.3
C402 0.047
R415 4.7K
C401 820P
R416 68K
D407 MA159
D406 MA159
R483 62
R414 1K
R412 1K
R411 1K
R410 1K
R413 1K
R402 10K
R403 10K
R404 4.7K
R405 10K
R406 1K
R429 1K
R430 1K
VR402
SW402
Rotary Encoder Volume
(Audio Control & MODE/○BBE△LOUD)
D405 DA204K
D404 DA204K
D403 DA204K
D402 DA204K
D401 DA204K
D409 DA204K
SW410
SW409
SW408
SW411
SW414
SW407
SW406
SW404
SW412
SW415
SW403
SW413
SW416
SW405
SW401
SW417
SW401:PWR/INTLZ
SW403:SOURCE
SW404:EJECT
SW405:DN/REW
SW406:FF/UP
SW407:TUNE/A.ME/PLAY/PAUSE
SW408:BAND/PROG/T.S.M.
SW409:T.R.V.S./TITLE
SW410:T.INFO
SW411:AF/1/ONR B·C ●NR B/7
SW412:PTY/2/P.S.DN/8
SW413:P.PTY/3/P.S.UP/9
SW414:M.I.X./4/B.SKIP/10
SW415:RPT/5/11
SW416:SCAN/6/12
SW417:F
2 LIGHTING SELECTOR
LCD401 LCD Display
COM1
COM2
COM3
IC402 RS-31
REMOCON IC
FIRST AMP LIMITER
BPF+TRAP
DETECTOR
WAVE FORM SHAPING
ABLC
PHOTO DIO.
TP1
TP2
IN+
IN-
fo
Vcc
Rs
RL
OUT
GND
Cd
GND1
GND2
REMOTE CONTROL RECEIVER
R407 1K
INDICATOR DRIVER
R422 2.2K
Q402 2SD1328T
R423 2.2K
Q403 2SD1328T
PL401 9V-85mA
R451 12-1/4W
PL402 9V-85mA
R452 12-1/4W
PL403 9V-100mA
R453 13-1/4W
PL404 9V-100mA
R454 13-1/4W
R482 1K
Q401 FMC2
R428 47K
R424 2.2K
Q404 2SD1328T
LD402
LD401
LD403
SML-010DTT87×3
R457 330-1/4W
R458 270-1/4W
R425 2.2K
PL413 6V-80mA
PL414 6V-80mA
R461 47-1/4W
R462 47-1/4W
Q405 2SD1328T
PL411 6V-80mA
PL412 6V-80mA
R459 24-1/4W
R460 24-1/4W
R426 2.2K
LD406
LD407
LD408
SML-010DTT87×3
R474 220-1/4W
R475 270-1/4W
Q406 2SD1328T
PL415 6V-80mA
R463 36-1/4W
R464 36-1/4W
R476 36-1/4W
R477 36-1/4W
R478 36-1/4W
R427 2.2K
PL417 6V-80mA
PL418 6V-80mA
R465 24-1/4W
R466 27-1/4W
Q407 2SD1328T
PL419 6V-80mA
R467 24-1/4W
R468 24-1/4W
R469 24-1/4W
R470 24-1/4W
R471 24-1/4W
Q408 DTC124EK
LD404 SML-010LTT87
R472 1K-1/4W
R479 1K-1/4W
Q409 DTC124EK
LD405 SML-010LTT87
R473 3.9K-1/4W
R489 2.2K
Q410 2SD1328T
LD410
LD411
LD409
SML-010DTT87×3
R487 330-1/4W
R488 270-1/4W
CH401
16 NOSE-IN
15 ENCODER1
14 ENCODER2
13 LCD RST
12 LCD CE
11 LCD CLK
10 LCD DI
9 LCD DO
8 REMOCON
7 LCD+B
6 NOSE PWR
5 LAMP+B
4 RESET
3 P.GND
2 NOSE-OUT
1 E.S.GND
To Main P.W.Board (CB401)


IC402
Q402 Q403 Q404
Q405 Q406
Q407 Q408 Q409 Q410
Q401
R414 1K
R412 1K
R411 1K
R410 1K
R413 1K
R402 10K
R403 10K
R404 4.7K
R405 10K
R406 1K
R483 62
R429 1K
R430 1K
VR402
SW402
Rotary Encoder
Volume
(Audio Control &
MODE/OBBE4LOUD)
D405 DA204K
D404 DA204K
D403 DA204K
D402 DA204K
D401 DA204K
D409
DA204K
16 NOSE-IN
15 ENCODER1
14 ENCODER2
13 LCD RST
12 LCD CE
11 LCD CLK
10 LCD DI
9 LCD DO
8 REMOCON
7 LCD+B
6 NOSE PWR
5 LAMP+B
4 RESET
3 P.GND
2 NOSE-OUT
1 E.S.GND
CH401
To Main P.W.Board (CB401)
R422 2.2K
Q402 2SD1328T
R423 2.2K
Q403 2SD1328T
PL401 9V-85mA
R451 12-1/4W
PL402 9V-85mA
R452 12-1/4W
PL403 9V-100mA
R453 13-1/4W
PL404 9V-100mA
R454 13-1/4W
R482 1K
Q401 FMC2
R428 47K
R424 2.2K
Q404 2SD1328T
LD402 LD401 LD403
SML-010DTT87×3
R457 330-1/4W
R458 270-1/4W
R425 2.2K
PL413 6V-80mA
PL414 6V-80mA
R461 47-1/4W
R462 47-1/4W
Q405 2SD1328T
PL411 6V-80mA
PL412 6V-80mA
R459 24-1/4W
R460 24-1/4W
R426 2.2K
LD406 LD407 LD408
SML-010DTT87×3
R474 220-1/4W
R475 270-1/4W
Q406 2SD1328T
PL415 6V-80mA
R463 36-1/4W
R464 36-1/4W
R476 36-1/4W
R477 36-1/4W
R478 36-1/4W
R427 2.2K
PL417 6V-80mA
PL418 6V-80mA
R465 24-1/4W
R466 27-1/4W
Q407 2SD1328T
PL419 6V-80mA
R467 24-1/4W
R468 24-1/4W
R469 24-1/4W
R470 24-1/4W
R471 24-1/4W
SW410 SW409 SW408 SW411 SW414
SW407 SW406 SW404 SW412 SW415
SW403 SW413 SW416
SW405 SW401 SW417
SW401:PWR/INTLZ
SW403:SOURCE
SW404:EJECT
SW405:DN/REW
SW406:FF/UP
SW407:TUNE/A.ME/PLAY/PAUSE
SW408:BAND/PROG/T.S.M.
SW409:T.R.V.S./TITLE
SW410:T.INFO
SW411:AF/1/○NR B·C ●NR B/7
SW412:PTY/2/P.S.DN/8
SW413:P.PTY/3/P.S.UP/9
SW414:M.I.X./4/B.SKIP/10
SW415:RPT/5/11
SW416:SCAN/6/12
SW417:F
2 LIGHTING SELECTOR
IC402 RS-31
TP1
REMOCON IC
FIRST AMP LIMITER
fo
DETECTOR
WAVE FORM SHAPING
BPF+TRAP
ABLC
Vcc
Rs
OUT
GND
Cd
IN
PHOTO DIO.
GND1
GND2
TP2
R407 1K
REMOTE CONTROL RECEIVER
Q408 DTC124EK
LD404 SML-010LT87
R472 1K-1/4W
R479 1K-1/4W
INDICATOR DRIVER
Q409 DTC124EK
LD405 SML-010LT87
R473 3.9K-1/4W
R489 2.2K
Q410 2SD1328T
LD410 LD411 LD409
R487 330-1/4W
R488 270-1/4W
SML-010DTT87×3

IC401

1, 2	5V	73, 74	0V
3	0V	75	4V
4~60	2.6V	76	5.2V
61~64	5V	77	5V
65~69	0V	78	0V
70	5V	79	5.2V
71, 72	NC	80	0V

IC402

1	5.1V
2	2.8V
3, 4	0V

	E	C	B	MODE
Q402	0V / 0V	0V / 9V	0.8V / 0V	ORG ON / OFF
Q403	0V / 0V	10V / 0V	0V / 0.8V	ORG ON / OFF
Q404	0V / 0V	0V / 9V	0.8V / 0V	ORG ON / OFF
Q405	0V / 0V	10V / 0V	0V / 0.8V	ORG ON / OFF
Q406	0V / 0V	0V / 9V	0.8V / 0V	ORG ON / OFF
Q407	0V / 0V	10V / 0V	0V / 0.8V	ORG ON / OFF
Q408	0V / 0V	13V / 0V	0V / 5V	FUNC ON / OFF
Q409	0V / 0V	0V / 0V	0.8V / 5V	REM ON / OFF
Q410	0V / 0V	0V / 9V	0.8V / 0V	ORG ON / OFF

	1	2	3	4	5	MODE
Q401	NC	0V / 4V	10V / 4.1V	0V / 5V	0V / 0V	ORG ON / OFF

[Measuring Conditions]

• Power Supply Voltage	: DC14.4V
• Measuring Meter	: Digital Multi Meter
• Measuring Point Reference	: Between Ground
• Measuring Conditions	: No Signal Input
	FM 98.1MHz
	MW 999kHz
	LW 216kHz
	Tape ..... Blank

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1,000,000}$

Description of IC Terminal

85151W24 : IC501

No.	Symbol	I/O	Terminal Description
1	NC	—	No Connection Terminal.
2	NOSE PWR	O	Power Control Signal Output Terminal to NOSE.
3	BUZZER	O	Guide Tone Signal Output Terminal.
4	DTS START	O	Data Start Signal Output Terminal to DTS μ-COM.
5	DTS MUTE	I	Mute Signal Input Terminal from DTS μ-COM.
6	DTS CE	O	CE Signal Output Terminal to DTS μ-COM.
7	NC	—	No Connection Terminal.
8	ADJ EV-DATA	O	Serial Data Output Terminal to Electrical Volume (TEA6324T) for ADJ-NFP.
9	GND	—	GND Connection Terminal.
10	DOLBY B	O	B NR ON / OFF Signal Output Terminal.
11	○ DOLBY C	O	C NR ON / OFF Signal Output Terminal.
	△ NC	—	No Connection Terminal.
12	L.O.FAST	O	Gain Control Signal Output Terminal to M.S.IC at CUE / REV.
13	FOR / REV	O	Tape Derection Indicator Output Terminal.
14	O.MOTOR	O	Motor Rotation Control Output Terminal.
15	R-IN	O	Sub-Motor Rotation Control Output Terminal.
16	F-IN	O	
17	MTR FAST	I	Main-Motor Rotation Control Input Terminal.
18	M.S.DET	I	Blank Detection Signal Input Terminal.
19	METAL	I	Metal Tape Detection Terminal.
20	PACK IN	I	Pack in Detection Input Terminal.
21	REV DET	I	Detection Input Terminalof of REV Reel Rotation.
22	MODE SW	I	MODE Detection Input Terminal.
23	FOR DET	I	Detection Input Terminalof of FOR Reel Rotation.
24	GND	—	GND Connection Terminal.
25	PAUSE SW	I	Pause Mode Detection Input Terminal.
26	MUTE	O	Audio Mute Signal Output Terminal.
27	NFP-1	O	NFP Control Signal Output Terminal.
28	NFP-2	O	
29	EV-DATA	O	Serial Data Output Terminal to Electrical Volume (TEA6320T).
30	EV-CLK	O	Serial Clock Output Terminal to Electrical Volume (TEA6320T, TEA6324T).
31	PWR IC	O	Stand-by Control Signal Output Terminal to Power IC.
32	PWR ON	O	Power Control Signal Output Terminal to Audio Lighting etc.
33	NC	—	No Connection Terminal.
34	BUS OUT	O	Signal Output Terminal to BUS Interface.
35	RESET	I	System Reset Input Terminal.
36	REMOCON	I	Remote Control Data Input Terminal.
37	BUS IN	I	Signal Input Terminal from BUS Interface.

No.	Symbol	I/O	Terminal Description
38	ACC DET	I	ACC (Ignition) Detection Input Terminal.
39	BAT DET	I	Battery Detection Input Terminal. (Forced Stand-by)
40	V_{DD}	—	+5V Connection Terminal.
41	X2	O	OSC Connection Terminal. (8.368MHz)
42	X1	I	
43	GND	—	GND Connection Terminal.
44	NC	—	No Connection Terminal.
45	GND	—	GND Connection Terminal.
46			
47	NOSE-DET	I	NOSE ON / OFF Detection Terminal.
48	IN INT	I	Mutual Reset IN-INT Signal Input Terminal.
49	MODEL	I	Model Set Up Input Terminal.
50	ENCODER1	I	Encoder Data Input Terminal (B).
51	ENCODER2	I	Encoder Data Input Terminal (A).
52	○ BBE1	O	BBE Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
53	○ BBE2	O	PROCESS Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
54	○ BBE3	O	LO CONT Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
55	AV_{DD}	—	+5V Connection Terminal.
56	AV_{REF}	—	
57	LCD DO	I	Serial Data Input Terminal from LCD Driver (LC75883W).
58	LCD DI	O	Serial Data Output Terminal to LCD Driver (LC75883W).
59	LCD CLK	O	Serial Clock Output Terminal to LCD Driver (LC75883W).
60	LCD CE	O	Serial Data Sync. Signal Output Terminal to LCD Driver (LC75883W).
61	LCD RST	O	Reset Signal Output Terminal to LCD Driver (LC75883W).
62	DTS STS	I	Serial Data Input Terminal from DTS μ-COM.
63	DTS CMD	O	Serial Data Output Terminal to DTS μ-COM.
64	DTS CLK	O	Serial Clock Output Terminal to DTS μ-COM.

85312W65 : IC502

No.	Symbol	I/O	Terminal Description
1	NC	—	No Connection Terminal.
2			
3	PULL-DOWN	I/O	PULL-DOWN Connection Terminal.
4	AV_{SS}	—	GND Connection Terminal.
5	SD SW	O	SD Control Terminal of Switching Tuner Time Constant at AF Check.
6	IF MUTE	O	Mute Control Terminal for Rejection of Tuner Noise at AF Check.
7	AV_{REF}	—	+5V Connection Terminal.

No.	Symbol	I/O	Terminal Description
38	ACC DET	I	ACC (Ignition) Detection Input Terminal.
39	BAT DET	I	Battery Detection Input Terminal. (Forced Stand-by)
40	V_{DD}	—	+5V Connection Terminal.
41	X2	O	OSC Connection Terminal. (8.368MHz)
42	X1	I	
43	GND	—	GND Connection Terminal.
44	NC	—	No Connection Terminal.
45	GND	—	GND Connection Terminal.
46			
47	$\overline{\text{NOSE-DET}}$	I	NOSE ON / OFF Detection Terminal.
48	IN INT	I	Mutual Reset IN-INT Signal Input Terminal.
49	MODEL	I	Model Set Up Input Terminal.
50	ENCODER1	I	Encoder Data Input Terminal (B).
51	ENCODER2	I	Encoder Data Input Terminal (A).
52	○ BBE1	O	BBE Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
53	○ BBE2	O	PROCESS Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
54	○ BBE3	O	LO CONT Control Output Terminal for BBE.
	△ NC	—	No Connection Terminal.
55	AV_{DD}	—	+5V Connection Terminal.
56	AV_{REF}	—	
57	LCD DO	I	Serial Data Input Terminal from LCD Driver (LC75883W).
58	LCD DI	O	Serial Data Output Terminal to LCD Driver (LC75883W).
59	LCD CLK	O	Serial Clock Output Terminal to LCD Driver (LC75883W).
60	LCD CE	O	Serial Data Sync. Signal Output Terminal to LCD Driver (LC75883W).
61	LCD RST	O	Reset Signal Output Terminal to LCD Driver (LC75883W).
62	DTS STS	I	Serial Data Input Terminal from DTS µ-COM.
63	DTS CMD	O	Serial Data Output Terminal to DTS µ-COM.
64	$\overline{\text{DTS CLK}}$	O	Serial Clock Output Terminal to DTS µ-COM.

85312W65 : IC502

No.	Symbol	I/O	Terminal Description
1	NC	—	No Connection Terminal.
2			
3	PULL-DOWN	I/O	PULL-DOWN Connection Terminal.
4	AV_{SS}	—	GND Connection Terminal.
5	$\overline{\text{SD SW}}$	O	SD Control Terminal of Switching Tuner Time Constant at AF Check.
6	IF MUTE	O	Mute Control Terminal for Rejection of Tuner Noise at AF Check.
7	AV_{REF}	—	+5V Connection Terminal.

No.	Symbol	I/O	Terminal Description
8	RxD	I	RDS Monitor Input Terminal.
9	TxD	O	RDS Monitor Output Terminal.
10	NC	—	No Connection Terminal.
11	DTS COMMAND	I	Serial Data Input Terminal from Main µ-COM.
12	DTS STATUS	O	Serial Data Output Terminal to Main µ-COM.
13	DTS CLOCK	I	Sync. Signal Input Terminal from Main µ-COM.
14	$\overline{\text{DTS MUTE}}$	O	Mute Signal Output Terminal to Main µ-COM.
15	DTS START	I	Command Sync. Input Terminal from Main µ-COM.
16	NC	—	No Connection Terminal.
17	I2C DATA	I/O	Data Communication Terminal to RDS Decoder.
18	I2C CLOCK	I/O	Sync. Communication Terminal to RDS Decoder.
19	DAVN	O	RDS Data Available Input Terminal.
20	RDS RESET	O	RESET Output Terminal to RDS Decoder.
21 ≀ 32	NC	—	No Connection Terminal.
33	V_{SS}	—	GND Connection Terminal.
34 ≀ 53	NC	—	No Connection Terminal.
54	PLL DI	I	PLL Data Input Terminal.
55	PLL CLK	O	PLL Clock Output Terminal.
56	PLL DO	O	PLL Data Output Terminal.
57	PLL CE	O	PLL CE Output Terminal.
58	NC	—	No Connection Terminal.
59			
60	$\overline{\text{RESET}}$	I	RESET Input Terminal.
61	NC	—	No Connection Terminal.
62			
63	DTS CE	I	Stand-by Control Signal Input Terminal from Main µ-COM.
64 ≀ 66	NC	—	No Connection Terminal.
67	$50K_{REF}$	O	LPF Switching Control Terminal.
68	V_{DD}	—	+5V Connection Terminal.
69	X2	O	Crystal Connection Terminal. (4.9152MHz)
70	X1	I	
71	GND	—	GND Connection Terminal.
72	NC	—	No Connection Terminal.
73			

No.	Symbol	I/O	Terminal Description
74	AV_{DD}	—	+5V Connection Terminal.
75	AV_{REF}		
76	S/M	I	Field Strength Input Terminal.
77	M/P	I	Multi Path Rejection Detecting Input Terminal.
78	GND	—	GND Connection Terminal.
79	FM SD/ST	I	FM SD / ST Signal Input Terminal.
80	AM SD	I	AM SD Signal Input Terminal.

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
Capacitor : μ F=microfarads,pF=picofarads

Abbreviations

RES.= Resistor
C.F.= Carbon Film
M.F.= Metal Film
M.O.= Metal Oxide Film
M.P.= Metal Plate
TR. = Transistor
TRANS.= Transformer
CP. = Chip

CAP.= Capacitor
ELY.= Electrolytic
CER.= Ceramic
MYL.= Mylar
TAN.= Tantalum
POLY.= Polystyrol
PP. = Polypropylene
PLT.= Polyethylene
PF. = Polyester Film

Main P.W.Board

IC's

	Symbol No.	Part No.	Description
	IC001	51E20551S01	NJM4558M
	IC002	51E23844S01	NJU4066BM
	IC003	51T85265W02	LC72191JM
	IC004	51T15132Y01	SAA6588T
	IC005	51T75197W05	AN77L05M
	IC007	51E23842S01	NJM2904M
○	IC201	51T85167W01	CXA2502M
△	IC201	51T11210W01	CXA1102M
	IC202	51T65131W01	TEA6320T
	IC203	51E22130S01	NJM4560M
	IC204	51E23844S01	NJU4066BM
	IC205	51E20551S01	NJM4558M
	IC206	51E22130S01	NJM4560M
	IC207	51E20551S01	NJM4558M
○	IC209	51T15168Y01	TEA6324T
	IC210	51T15021Y01	TDA7386
○	IC211	51T15468Y01	NJM2150AM
	IC501	51T85151W37	85151W37
	IC502	51T85312W65	85312W65
	IC503	51T95014F13	S-8052HNM-CR
	IC504	51T95563W01	S-80744HL
	IC505	51E23843S01	NJM2903M

Transistors

	Symbol No.	Part No.	Description
	Q001	48E23541S01	2SB1238
	Q002	48E10426S01	CP., DTC124EK
	Q004	48E23846S01	CP., FMG1
	Q005	48E10426S01	CP., DTC124EK
	Q006	48E22092S01	CP., DTA124EK
	Q007	48E10426S01	CP., DTC124EK
	Q008	48E10426S01	CP., DTC124EK
	Q009	48E11274S01	CP., FMC2
	Q060	48E22093S01	CP., DTC114EK
○	Q204	48T63788F04	CP., 2SD1328T
○	Q205	48T63788F04	CP., 2SD1328T
	Q206	48T63788F04	CP., 2SD1328T
	Q207	48T63788F04	CP., 2SD1328T
	Q208	48T63788F04	CP., 2SD1328T
	Q209	48T63788F04	CP., 2SD1328T
	Q210	48E10426S01	CP., DTC124EK
	Q211	48E27905S01	CP., DTC144TK
	Q212	48E27905S01	CP., DTC144TK
○	Q221	48T94471F03	CP., IMH1A
	Q291	48E23846S01	CP., FMG1
	Q502	48E22093S01	CP., DTC114EK
	Q503	48E22093S01	CP., DTC114EK
	Q504	48E22093S01	CP., DTC114EK
	Q505	48E22900S01	CP., 2SA1037K
	Q506	48T52437F01	CP., 2SB709A
	Q507	48T52438F01	CP., 2SD601A
	Q508	48E22092S01	CP., DTA124EK
	Q509	48E11274S01	CP., FMC2
	Q510	48E11274S01	CP., FMC2
	Q511	48E11274S01	CP., FMC2
	Q520	48E10426S01	CP., DTC124EK
	Q801	48E09399S01	2SB1243
	Q802	48E22095S01	CP., DTC143XK
	Q803	48T25169W01	2SD2096
	Q804	48T69176F01	2SC3421
	Q805	48E23542S01	2SD2008
	Q808	48E09399S01	2SB1243
	Q809	48E22093S01	CP., DTC114EK
	Q810	48E22900S01	CP., 2SA1037K
	Q811	48E10426S01	CP., DTC124EK
	Q812	48E23606S01	2SD1859
	Q813	48E22092S01	CP., DTA124EK
	Q814	48E23601S01	CP., DTC114TK
	Q815	48E26560S01	CP., FMC3
	Q817	48E23890S01	CP., DTA143EK
	Q818	48E11274S01	CP., FMC2
	Q822	48T93828F01	2SD1994A
	Q823	48E23845S01	CP., 2SC2412K

Diodes

	Symbol No.	Part No.	Description
	D002	48E10945S01	CP., DAN202K
○	D205	48E23841S01	CP., DAP202K
○	D206	48E23841S01	CP., DAP202K
○	D207	48E23841S01	CP., DAP202K

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
D501	48E10945S01	CP., DAN202K
D503	48E23841S01	CP., DAP202K
D504	48E10945S01	CP., DAN202K
D505	48E10945S01	CP., DAN202K
D506	48E22916S01	1SS133
D507	48E22916S01	1SS133
D801	48E10945S01	CP., DAN202K
D802	48T68580F03	DSA3A4
D803	48E22916S01	1SS133
D804	48E20758S01	11ES2
D805	48E22916S01	1SS133
D806	48E10945S01	CP., DAN202K
D808	48E20758S01	11ES2
ZD801	48T83128F27	Zener, HZS9C3L
ZD802	48T83128F25	Zener, HZS9C1L
ZD803	48T83128F25	Zener, HZS9C1L
ZD804	48T83128F13	Zener, HZS7B1L
ZD805	48T83128F04	Zener, HZS6B1L
ZD806	48T83128F01	Zener, HZS6A1L

Buzzer

Symbol No.	Part No.	Description
BZ501	50T25148W02	CB13PA-225

Coils

Symbol No.	Part No.	Description
L001	25E23608S01	Inductor, 4.7μH
L002	24E27906S01	Inductor, CP. 15μH
L003	24E09424S01	AM Trap
L004	24E22096S01	Inductor, CP. 1μH
L010	24E22096S01	Inductor, CP. 1μH
L501	24E22096S01	Inductor, CP. 1μH
L502	24E22096S01	Inductor, CP. 1μH
L801	24E27902S01	Choke

Crystals

Symbol No.	Part No.	Description
XL001	91E24846S01	7.2MHz
XL002	91E27606S01	4.332MHz
XL501	91E24848S01	8.3886MHz
XL503	91E27605S01	4.9152MHz

Filters

Symbol No.	Part No.	Description
LPF001	91T75257W02	LPF, LPF11830KH

Surge Protector

Symbol No.	Part No.	Description
DSP001	48T81909F01	DSP-201M

Switches

Symbol No.	Part No.	Description
SW502	40E22024S01	Slide, SSJ742NE (Ai-NET • NORM/(EQ/DIV))
SW503	40T75104W01	Tact, SKHLLB (RESET)

Capacitors

	Symbol No.	Part No.	Description
	C001	08E27735S01	CP., 0.056μF
	E001	23E09402S10	ELY., 0.1μF / 50V
	C002	08E22088S01	CP., 0.1μF
	E002	23E09402S02	ELY., 10μF / 16V
	C003	08E22085S01	CP., 0.022μF
	E003	23E09402S01	ELY., 1μF / 50V
	C004	08E22085S01	CP., 0.022μF
	C005	08E22083S01	CP., 0.01μF
	E005	23E09403S03	ELY., (B.P) 2.2μF / 35V
	C006	08E22083S01	CP., 0.01μF
	E006	23E20849S01	ELY., 100μF / 10V
	C007	08E22435S01	TF, 0.1μF
	E007	23E20849S01	ELY., 100μF / 10V
	C008	08E22083S01	CP., 0.01μF
	C009	08E22938S01	TF, 0.047μF
	E009	23E09402S11	ELY., 22μF / 16V
	E011	23E09402S13	ELY., 2.2μF / 50V
	C014	08E22083S01	CP., 0.01μF
	C015	08E23583S01	CP., 1000pF
	C016	08E23583S01	CP., 1000pF
	C017	08E23583S01	CP., 1000pF
	C018	08E23583S01	CP., 1000pF
	C019	08E22085S01	CP., 0.022μF
	C020	08E20550S01	CP., 22pF
	C021	08E20550S01	CP., 22pF
○	C024	08E22931S01	CP., 2200pF
△	C024	08E27920S01	CP., 2200pF
	C025	08E27612S01	CP., 560pF
	C026	08E22079S01	CP., 330pF
	C028	08E26532S01	CP., 0.1μF
	C029	08E08423S04	CP., 27pF
	C032	08E22899S01	CP., 100pF
	C034	08E22085S01	CP., 0.022μF
	C036	08E22080S01	CP., 470pF
	C038	08E22083S01	CP., 0.01μF

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.		Part No.	Description	
	C039	08E08423S04	CP.,	27pF
	C042	08E26128S01	CP.,	270pF
	C043	08E26128S01	CP.,	270pF
	E060	23E09402S11	ELY.,	22µF / 16V
	E061	23E09402S11	ELY.,	22µF / 16V
	C091	08E22931S01	CP.,	2200pF
	C201	08E22083S01	CP.,	0.01µF
	E201	23E22993S01	ELY.,	1µF / 50V
	C202	08E20755S01	TF,	0.033µF
	E202	23E22993S01	ELY.,	1µF / 50V
	C203	08E20755S01	TF,	0.033µF
	E203	23E22994S01	ELY.,	10µF / 16V
	C204	08E23894S01	TF,	5600pF
	E204	23E22562S01	ELY.,	4.7µF / 50V
	C205	08E23894S01	TF,	5600pF
○	E205	23E09402S02	ELY.,	10µF / 16V
△	E205	23E09402S11	ELY.,	22µF / 16V
○	E206	23E22993S01	ELY.,	1µF / 50V
△	E206	23E22992S01	ELY.,	0.68µF / 50V
○	E207	23E22993S01	ELY.,	1µF / 50V
△	E207	23E22992S01	ELY.,	0.68µF / 50V
○	C208	08E22525S01	TF,	0.068µF
	E208	23E09402S01	ELY.,	1µF / 50V
○	C209	08E22525S01	TF,	0.068µF
	E209	23E22993S01	ELY.,	1µF / 50V
○	C210	08E22083S01	CP.,	0.01µF
	E210	23E22993S01	ELY.,	1µF / 50V
	E211	23E23604S01	ELY.,	4.7µF / 35V
○	C212	08E08577S04	CP.,	0.027µF
	E212	23E23604S01	ELY.,	4.7µF / 35V
	E213	23E22995S01	ELY.,	47µF / 16V
○	C214	08E08577S04	CP.,	0.027µF
	E214	23E23261S01	ELY.,	100µF / 10V
	E215	23E22992S01	ELY.,	0.68µF / 50V
○	C216	08E23599S01	CP.,	5600pF
	E216	23E22992S01	ELY.,	0.68µF / 50V
	E217	23E09402S01	ELY.,	1µF / 50V
○	C218	08E23599S01	CP.,	5600pF
	E218	23E22994S01	ELY.,	10µF / 16V
	C219	08E08577S04	CP.,	0.027µF
	E219	23E22993S01	ELY.,	1µF / 50V
○	C220	08E26536S01	TF,	3300pF
	E220	23E22993S01	ELY.,	1µF / 50V
○	C221	08E26536S01	TF,	3300pF
	E221	23E22994S01	ELY.,	10µF / 16V
○	C222	08E20755S01	TF,	0.033µF
○	E222	23E22995S01	ELY.,	47µF / 16V
○	C223	08E20755S01	TF,	0.033µF
○	E223	23E23261S01	ELY.,	100µF / 10V

Symbol No.		Part No.	Description	
○	E224	23E23604S01	ELY.,	4.7µF / 35V
	E225	23E22993S01	ELY.,	1µF / 50V
○	E226	23E22994S01	ELY.,	10µF / 16V
○	E227	23E22994S01	ELY.,	10µF / 16V
	E228	23E22994S01	ELY.,	10µF / 16V
	E229	23E22994S01	ELY.,	10µF / 16V
	E230	23E22994S01	ELY.,	10µF / 16V
	E231	23E22994S01	ELY.,	10µF / 16V
	E232	23E22993S01	ELY.,	1µF / 50V
	E233	23E22994S01	ELY.,	10µF / 16V
	E234	23E22994S01	ELY.,	10µF / 16V
	E235	23E22994S01	ELY.,	10µF / 16V
	E236	23E23892S01	ELY.,	0.33µF / 50V
	E237	23E23892S01	ELY.,	0.33µF / 50V
	E238	23E23892S01	ELY.,	0.33µF / 50V
	E239	23E23892S01	ELY.,	0.33µF / 50V
	E240	23E09402S01	ELY.,	1µF / 50V
	E241	23E22995S01	ELY.,	47µF / 16V
	E242	23E22993S01	ELY.,	1µF / 50V
	E243	23E09402S02	ELY.,	10µF / 16V
	E244	23E27922S01	ELY.,	4700µF / 16V
○	E246	23E22992S01	ELY.,	0.68µF / 50V
○	E247	23E22992S01	ELY.,	0.68µF / 50V
	E248	23E22993S01	ELY.,	1µF / 50V
	E249	23E22994S01	ELY.,	10µF / 16V
	E250	23E22993S01	ELY.,	1µF / 50V
○	E251	23E22994S01	ELY.,	10µF / 16V
○	E252	23E22994S01	ELY.,	10µF / 16V
○	E253	23E22994S01	ELY.,	10µF / 16V
○	E254	23E22994S01	ELY.,	10µF / 16V
○	E255	23E23604S01	ELY.,	4.7µF / 35V
○	E256	23E09402S02	ELY.,	10µF / 16V
○	E257	23E09402S02	ELY.,	10µF / 16V
○	E258	23E09402S02	ELY.,	10µF / 16V
○	E259	23E22994S01	ELY.,	10µF / 16V
	E260	23E22993S01	ELY.,	1µF / 50V
	C280	08E22899S01	CP.,	100pF
	C281	08E22899S01	CP.,	100pF
○	C294	08E08577S04	CP.,	0.027µF
○	C295	08E08577S04	CP.,	0.027µF
	C501	08E08577S04	CP.,	0.027µF
	E501	23E23263S01	ELY.,	220µF / 10V
	C502	08E08577S04	CP.,	0.027µF
	E502	23E09402S02	ELY.,	10µF / 16V
	C503	08E23580S01	CP.,	24pF
	E503	23E09402S02	ELY.,	10µF / 16V
	C504	08E23580S01	CP.,	24pF
	E504	23E09402S09	ELY.,	100µF / 10V
	C510	08E27836S01	CP.,	1500pF

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
C511	08E22088S01	CP., 0.1µF
C512	08E23580S01	CP., 24pF
C513	08E23580S01	CP., 24pF
C515	08E22083S01	CP., 0.01µF
C517	08E23583S01	CP., 1000pF
C520	08E22899S01	CP., 100pF
C521	08E08423S04	CP., 27pF
C522	08E27616S01	TF, 0.33µF
C551	08E22899S01	CP., 100pF
C552	08E08423S04	CP., 27pF
C589	08E22899S01	CP., 100pF
C590	08E22899S01	CP., 100pF
C591	08E26128S01	CP., 270pF
C801	08E22083S01	CP., 0.01µF
C802	08E08557S04	CP., 0.027µF
E802	23E26562S01	ELY., 33µF / 16V
C803	08E08557S04	CP., 0.027µF
E803	23E23261S01	ELY., 100µF / 10V
E805	23E09402S02	ELY., 10µF / 16V
E806	23E09402S10	ELY., 0.1µF / 50V
E807	23E09402S01	ELY., 1µF / 50V
E809	23E09402S02	ELY., 10µF / 16V
E810	23E23848S01	ELY., 220µF / 10V
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)
R001	06E22055S01	4.7K ohm
R002	06E20903S01	10K ohm
R003	06E20850S01	39K ohm
R004	06E22055S01	4.7K ohm
R005	06E22898S01	36K ohm
R007	06E22061S01	33K ohm
R008	06E22064S01	68K ohm
R009	06E27611S01	75K ohm
R011	06E22951S01	3K ohm
R012	06E22048S01	1K ohm
R013	06E22048S01	1K ohm
R014	06E22507S01	15K ohm
R015	06E22507S01	15K ohm
R016	06E22048S01	1K ohm
R017	06E22048S01	1K ohm
R018	06E22051S01	2.2K ohm
R019	06E22051S01	2.2K ohm
R020	06E22059S01	18K ohm
R021	06E22041S01	100 ohm
R022	06E22060S01	22K ohm
R023	06E22048S01	1K ohm
R025	06E22060S01	22K ohm

Symbol No.		Part No.	Description
	R026	06E27909S01	2.2K ohm 1/8W
	R027	06E20903S01	10K ohm
	R028	06E20903S01	10K ohm
	R030	06E20903S01	10K ohm
	R031	06E22062S01	47K ohm
	R032	06E22048S01	1K ohm
	R033	06E22048S01	1K ohm
	R034	06E22048S01	1K ohm
	R035	06E22048S01	1K ohm
	R036	06E27903S01	27 ohm
	R037	06E20903S01	10K ohm
	R038	06E22067S01	470K ohm
	R041	06E22051S01	2.2K ohm
	R042	06E24357S01	270 ohm
	R043	06E24357S01	270 ohm
	R044	06E22505S01	470 ohm
	R046	06E22051S01	2.2K ohm
	R047	06E20904S01	27K ohm
	R049	06E22060S01	22K ohm
	R050	06E22060S01	22K ohm
	R051	06E22055S01	4.7K ohm
	R052	06E22048S01	1K ohm
	R059	06E27907S01	100 ohm 1/8W
	R061	06E23596S01	8.2 ohm 1/4W
	R062	06E23596S01	8.2 ohm 1/4W
	R063	06E23596S01	8.2 ohm 1/4W
	R081	06E22062S01	47K ohm
	R090	06E27903S01	27 ohm
	R091	06E22048S01	1K ohm
	R201	06E22062S01	47K ohm
	R202	06E22062S01	47K ohm
	R203	06E22061S01	33K ohm
	R204	06E22061S01	33K ohm
	R205	06E22062S01	47K ohm
	R206	06E22062S01	47K ohm
	R207	06E22062S01	47K ohm
○	R209	06E22508S01	20K ohm
○	R210	06E22508S01	20K ohm
	R211	06E21164S01	1.5K ohm
	R212	06E21164S01	1.5K ohm
	R213	06E22053S01	3.3K ohm
	R214	06E22053S01	3.3K ohm
○	R215	06E22508S01	20K ohm
△	R215	06E20851S01	43K ohm
○	R217	06E22058S01	12K ohm
	R218	06E20903S01	10K ohm
	R219	06E20903S01	10K ohm
	R220	06E22507S01	15K ohm
	R221	06E22507S01	15K ohm

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
○ R222	06E22042S01	220 ohm
○ R223	06E22057S01	8.2K ohm
△ R224	06E22055S01	4.7K ohm
△ R225	06E22060S01	22K ohm
R226	06E20903S01	10K ohm
R227	06E22544S01	750 ohm
R228	06E22042S01	220 ohm
R229	06E22060S01	22K ohm
R230	06E22060S01	22K ohm
○ R231	06E24189S01	150 ohm
○ R232	06E24189S01	150 ohm
○ R233	06E22508S01	20K ohm
○ R234	06E22508S01	20K ohm
○ R235	06E20903S01	10K ohm
○ R236	06E20903S01	10K ohm
○ R237	06E20903S01	10K ohm
△ R240	06E22952S01	5.1K ohm
△ R241	06E22952S01	5.1K ohm
△ R242	06E22952S01	5.1K ohm
△ R243	06E22952S01	5.1K ohm
R244	06E22061S01	33K ohm
R245	06E20903S01	10K ohm
R247	06E22507S01	15K ohm
R248	06E22546S01	51K ohm
R249	06E22546S01	51K ohm
○ R251	06E24189S01	150 ohm
○ R252	06E24189S01	150 ohm
○ R253	06E22060S01	22K ohm
○ R254	06E22060S01	22K ohm
○ R255	06E22041S01	100 ohm
○ R256	06E22041S01	100 ohm
△ R257	06E22042S01	220 ohm
△ R258	06E22042S01	220 ohm
R259	06E22060S01	22K ohm
R260	06E22060S01	22K ohm
R261	06E22041S01	100 ohm
R262	06E22041S01	100 ohm
R263	06E24189S01	150 ohm
R264	06E24189S01	150 ohm
R265	06E22060S01	22K ohm
R266	06E22060S01	22K ohm
R267	06E22041S01	100 ohm
R268	06E22041S01	100 ohm
R269	06E23834S01	8.2K ohm
R270	06E23834S01	8.2K ohm
R271	06E23834S01	8.2K ohm
R272	06E23834S01	8.2K ohm
R273	06E22060S01	22K ohm
R274	06E22060S01	22K ohm
R275	06E22060S01	22K ohm
R276	06E22060S01	22K ohm
○ R277	06E22952S01	5.1K ohm
○ R278	06E22952S01	5.1K ohm
○ R279	06E22952S01	5.1K ohm
○ R280	06E22952S01	5.1K ohm
○ R281	06E22952S01	5.1K ohm
○ R282	06E22952S01	5.1K ohm
○ R289	06E20903S01	10K ohm
○ R290	06E20903S01	10K ohm
○ R293	06E20903S01	10K ohm
○ R294	06E22053S01	3.3K ohm
○ R295	06E22053S01	3.3K ohm
○ R296	06E20903S01	10K ohm
R501	06E20903S01	10K ohm
R502	06E22048S01	1K ohm
R503	06E22048S01	1K ohm
R504	06E22048S01	1K ohm
R505	06E22048S01	1K ohm
R506	06E22048S01	1K ohm
R507	06E22048S01	1K ohm
R508	06E22048S01	1K ohm
R509	06E22048S01	1K ohm
R510	06E22060S01	22K ohm
R511	06E22058S01	12K ohm
R520	06E20903S01	10K ohm
R521	06E22048S01	1K ohm
R522	06E22048S01	1K ohm
R523	06E22048S01	1K ohm
R524	06E22048S01	1K ohm
R525	06E22048S01	1K ohm
R526	06E22048S01	1K ohm
R527	06E22048S01	1K ohm
R528	06E22048S01	1K ohm
R531	06E22048S01	1K ohm
R532	06E22048S01	1K ohm
R533	06E22048S01	1K ohm
R534	06E22048S01	1K ohm
R535	06E22048S01	1K ohm
R536	06E22048S01	1K ohm
R537	06E22048S01	1K ohm
R538	06E22048S01	1K ohm
R539	06E22048S01	1K ohm
R540	06E22048S01	1K ohm
R541	06E22048S01	1K ohm
○ R542	06E20903S01	10K ohm
△ R542	06E22894S01	1.3K ohm
△ R543	06E22057S01	8.2K ohm
R544	06E22065S01	100K ohm

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
R545	06E22067S01	470K ohm
R546	06E22060S01	22K ohm
R547	06E22060S01	22K ohm
R548	06E20903S01	10K ohm
R549	06E22051S01	2.2K ohm
R550	06E22041S01	100 ohm
R551	06E22053S01	3.3K ohm
R552	06E22048S01	1K ohm
R553	06E20903S01	10K ohm
R554	06E22062S01	47K ohm
R555	06E22062S01	47K ohm
R556	06E22048S01	1K ohm
R557	06E22048S01	1K ohm
R558	06E22048S01	1K ohm
R559	06E22062S01	47K ohm
R560	06E22062S01	47K ohm
R561	06E22062S01	47K ohm
R562	06E22062S01	47K ohm
R563	06E22060S01	22K ohm
R564	06E22055S01	4.7K ohm
R565	06E22052S01	2.7K ohm
R566	06E20903S01	10K ohm
R567	06E22056S01	6.8K ohm
R568	06E20903S01	10K ohm
R569	06E22055S01	4.7K ohm
R570	06E22049S01	1.2K ohm
R571	06E22056S01	6.8K ohm
R572	06E23836S01	39 ohm 1/4W
R573	06E23836S01	39 ohm 1/4W
R574	06E23836S01	39 ohm 1/4W
R575	06E23836S01	39 ohm 1/4W
R576	06E22071S01	10 ohm 1/4W
R577	06E21164S01	1.5K ohm
R578	06E21164S01	1.5K ohm
R579	06E22051S01	2.2K ohm
R580	06E22051S01	2.2K ohm
R581	06E20903S01	10K ohm
R582	06E20903S01	10K ohm
R584	06E22048S01	1K ohm
R585	06E22048S01	1K ohm
R586	06E22048S01	1K ohm
R587	06E22048S01	1K ohm
R588	06E22060S01	22K ohm
R589	06E22060S01	22K ohm
R590	06E22051S01	2.2K ohm
R591	06E22051S01	2.2K ohm
R592	06E22048S01	1K ohm
R593	06E22065S01	100K ohm
R594	06E22065S01	100K ohm

	Symbol No.	Part No.	Description
	R595	06E22062S01	47K ohm
	R596	06E22060S01	22K ohm
	R597	06E22060S01	22K ohm
	R599	06E22048S01	1K ohm
	R601	06E22060S01	22K ohm
	R602	06E22111S01	5.6K ohm
	R603	06E22111S01	5.6K ohm
	R801	06E26014S01	10K ohm 1/8W
	R802	06E22075S01	1.5K ohm 1/4W
	R803	06E22075S01	1.5K ohm 1/4W
	R804	06E22548S01	470 ohm 1/4W
○	R805	06E22029S01	470 ohm 1/8W
△	R805	06E27918S01	560 ohm 1/8W
	R806	06E22062S01	47K ohm
	R807	06E20903S01	10K ohm
	R808	06E23596S01	8.2 ohm 1/4W
	R809	06E23596S01	8.2 ohm 1/4W
	R810	06E23596S01	8.2 ohm 1/4W
	R811	06E20903S01	10K ohm
	R812	06E20903S01	10K ohm
	R814	06E22076S01	2.2K ohm 1/4W
	R815	06E27910S01	10K ohm 1/8W
	R816	06E23597S01	1.8K ohm 1/4W
	R817	06E22033S01	4.7K ohm 1/8W
	R818	06E22033S01	4.7K ohm 1/8W
○	R819	06E22032S01	3.9K ohm 1/8W
△	R819	06E27919S01	3.9K ohm 1/8W
	R820	06E27904S01	6.8K ohm 1/4W
	R821	06E22049S01	1.2K ohm
	R823	06E26014S01	10K ohm 1/8W
	R824	06E23596S01	8.2 ohm 1/4W
	R825	06E23597S01	1.8K ohm 1/4W
	R829	06E22075S01	1.5K ohm 1/4W
	R830	06E27908S01	330 ohm 1/8W
	R831	06E23837S01	270 ohm 1/4W
	R832	06E23837S01	270 ohm 1/4W
	R833	06E20903S01	10K ohm
	VR201	18E20754S01	Variable, 10K ohm
	VR202	18E20754S01	Variable, 10K ohm

Front P.W.Board

IC's

	IC401	51T85152W01	LC75883W
	IC402	51T55639W01	RS-31

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
Transistors		
Q401	48E11274S01	CP., FMC2
Q402	48T63788F04	CP., 2SD1328T
Q403	48T63788F04	CP., 2SD1328T
Q404	48T63788F04	CP., 2SD1328T
Q405	48T63788F04	CP., 2SD1328T
Q406	48T63788F04	CP., 2SD1328T
Q407	48T63788F04	CP., 2SD1328T
Q408	48E10426S01	CP., DTC124EK
Q409	48E10426S01	CP., DTC124EK
Q410	48T63788F04	CP., 2SD1328T
Diodes		
D401	48E10946S01	CP., DA204K
D402	48E10946S01	CP., DA204K
D403	48E10946S01	CP., DA204K
D404	48E10946S01	CP., DA204K
D405	48E10946S01	CP., DA204K
D406	48T81063F01	CP., MA159
D407	48T81063F01	CP., MA159
D409	48E10946S01	CP., DA204K
Lamps		
PL401	65T75522W02	CP., 9V-85mA
PL402	65T75522W02	CP., 9V-85mA
PL403	65T85125W02	9V-100mA
PL404	65T85125W02	9V-100mA
PL411	65T75233W01	CP., 6V-80mA
PL412	65T75233W01	CP., 6V-80mA
PL413	65T75233W02	CP., 6V-80mA
PL414	65T75233W02	CP., 6V-80mA
PL415	65T75233W02	CP., 6V-80mA
PL417	65T75233W01	CP., 6V-80mA
PL418	65T75233W01	CP., 6V-80mA
PL419	65T75233W01	CP., 6V-80mA
LED's		
LD401	48T65477W05	CP., SML-010DTT87 (ORG)
LD402	48T65477W05	CP., SML-010DTT87 (ORG)
LD403	48T65477W05	CP., SML-010DTT87 (ORG)
LD404	48T65477W02	CP., SML-010LTT87 (RED)
LD405	48T65477W02	CP., SML-010LTT87 (RED)
LD406	48T65477W05	CP., SML-010DTT87 (ORG)

	Symbol No.	Part No.	Description
	LD407	48T65477W05	CP., SML-010DTT87 (ORG)
	LD408	48T65477W05	CP., SML-010DTT87 (ORG)
	LD409	48T65477W05	CP., SML-010DTT87 (ORG)
	LD410	48T65477W05	CP., SML-010DTT87 (ORG)
	LD411	48T65477W05	CP., SML-010DTT87 (ORG)
Switches			
	SW401	40E23611S01	Tact, CP. EVQPJU (PWR/INTLZ)
	SW403	40E23611S01	Tact, CP. EVQPJU (SOURCE)
	SW404	40E23611S01	Tact, CP. EVQPJU (EJECT)
	SW405	40E23611S01	Tact, CP. EVQPJU (DN/REW)
	SW406	40E23611S01	Tact, CP. EVQPJU (FF/UP)
	SW407	40E23611S01	Tact, CP. EVQPJU (TUNE/A.ME/PLAY/PAUSE)
	SW408	40E23611S01	Tact, CP. EVQPJU (BAND/PROG/T.S.M.)
	SW409	40E23611S01	Tact, CP. EVQPJU (T.R.V.S./TITLE)
	SW410	40E23611S01	Tact, CP. EVQPJU (T.INFO)
○	SW411	40E23611S01	Tact, CP. EVQPJU (AF/1/NR B • C/7)
△	SW411	40E23611S01	Tact, CP. EVQPJU (AF/1/NR B/7)
	SW412	40E23611S01	Tact, CP. EVQPJU (PTY/2/P.S.DN/8)
	SW413	40E23611S01	Tact, CP. EVQPJU (P.PTY/3/P.S.UP/9)
	SW414	40E23611S01	Tact, CP. EVQPJU (M.I.X./4/B.SKIP/10)
	SW415	40E23611S01	Tact, CP. EVQPJU (RPT/5/11)
	SW416	40E23611S01	Tact, CP. EVQPJU (SCAN/6/12)
	SW417	40E23611S01	Tact, CP. EVQPJU (F)
Capacitors			
	C401	08E22511S01	CP., 820pF
	E401	23T25191W39	CP. ELY., 6.8µF / 6.3V
	C402	08E22087S01	CP., 0.047µF
Resistors			(All resistors are chip 1/10W±5% unless otherwise noted.)
	R402	06E20903S01	10K ohm
	R403	06E20903S01	10K ohm
	R404	06E22055S01	4.7K ohm
	R405	06E20903S01	10K ohm
	R406	06E22048S01	1K ohm
	R407	06E22048S01	1K ohm
	R410	06E22048S01	1K ohm
	R411	06E22048S01	1K ohm
	R412	06E22048S01	1K ohm
	R413	06E22048S01	1K ohm

NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Symbol No.	Part No.	Description
R414	06E22048S01	1K ohm
R415	06E22055S01	4.7K ohm
R416	06E22064S01	68K ohm
R422	06E22051S01	2.2K ohm
R423	06E22051S01	2.2K ohm
R424	06E22051S01	2.2K ohm
R425	06E22051S01	2.2K ohm
R426	06E22051S01	2.2K ohm
R427	06E22051S01	2.2K ohm
R428	06E22062S01	47K ohm
R429	06E22048S01	1K ohm
R430	06E22048S01	1K ohm
R451	06E27916S01	12 ohm 1/4W
R452	06E27916S01	12 ohm 1/4W
R453	06E25234S01	13 ohm 1/4W
R454	06E25234S01	13 ohm 1/4W
R457	06E22073S01	330 ohm 1/4W
R458	06E23837S01	270 ohm 1/4W
R459	06E23264S01	24 ohm 1/4W
R460	06E23264S01	24 ohm 1/4W
R461	06E20546S01	47 ohm 1/4W
R462	06E20546S01	47 ohm 1/4W
R463	06E27917S01	36 ohm 1/4W
R464	06E27917S01	36 ohm 1/4W
R465	06E23264S01	24 ohm 1/4W
R466	06E22114S01	27 ohm 1/4W
R467	06E23264S01	24 ohm 1/4W
R468	06E23264S01	24 ohm 1/4W
R469	06E23264S01	24 ohm 1/4W
R470	06E23264S01	24 ohm 1/4W
R471	06E23264S01	24 ohm 1/4W
R472	06E22074S01	1K ohm 1/4W
R473	06E23860S01	3.9K ohm 1/4W
R474	06E20752S01	220 ohm 1/4W
R475	06E23837S01	270 ohm 1/4W
R476	06E27917S01	36 ohm 1/4W
R477	06E27917S01	36 ohm 1/4W
R478	06E27917S01	36 ohm 1/4W
R479	06E22074S01	1K ohm 1/4W
R482	06E22048S01	1K ohm
R483	06E24142S01	62 ohm
R487	06E22037S01	330 ohm 1/4W
R488	06E23837S01	270 ohm 1/4W
R489	06E22051S01	2.2K ohm

Symbol No.	Part No.	Description
Miscellaneous		
CB401	09T85354W16	Connector (16P)
CH401	09T85353W16	Connector (16P)
ET001	09E25398S01	Assy., Antenna Receptacle
○ ET202	01E27911S01	Assy., RCA Connector (FRONT OUT & REAR OUT)
△ ET202	01E27921S01	Assy., RCA Connector (F-OUT/NFP & REAR OUT)
○ ET203	01E27912S01	Assy., RCA Connector (SUB-W)
ET501	01E27913S01	Assy., Remote Control Interface Connector
ET801	09E23591S01	Speaker Output & Power Supply Connector
DIN802	09T55071W11	Ai-NET Connector
LCD401	65T15318Y01	LCD Display
○ VR402 ○ SW402	18E26570S01	Volume, Rotary Encoder (AUDIO CONTROL & MODE/BBE)
△ VR402 △ SW402	18E26570S01	Volume, Rotary Encoder (AUDIO CONTROL & MODE/LOUD)

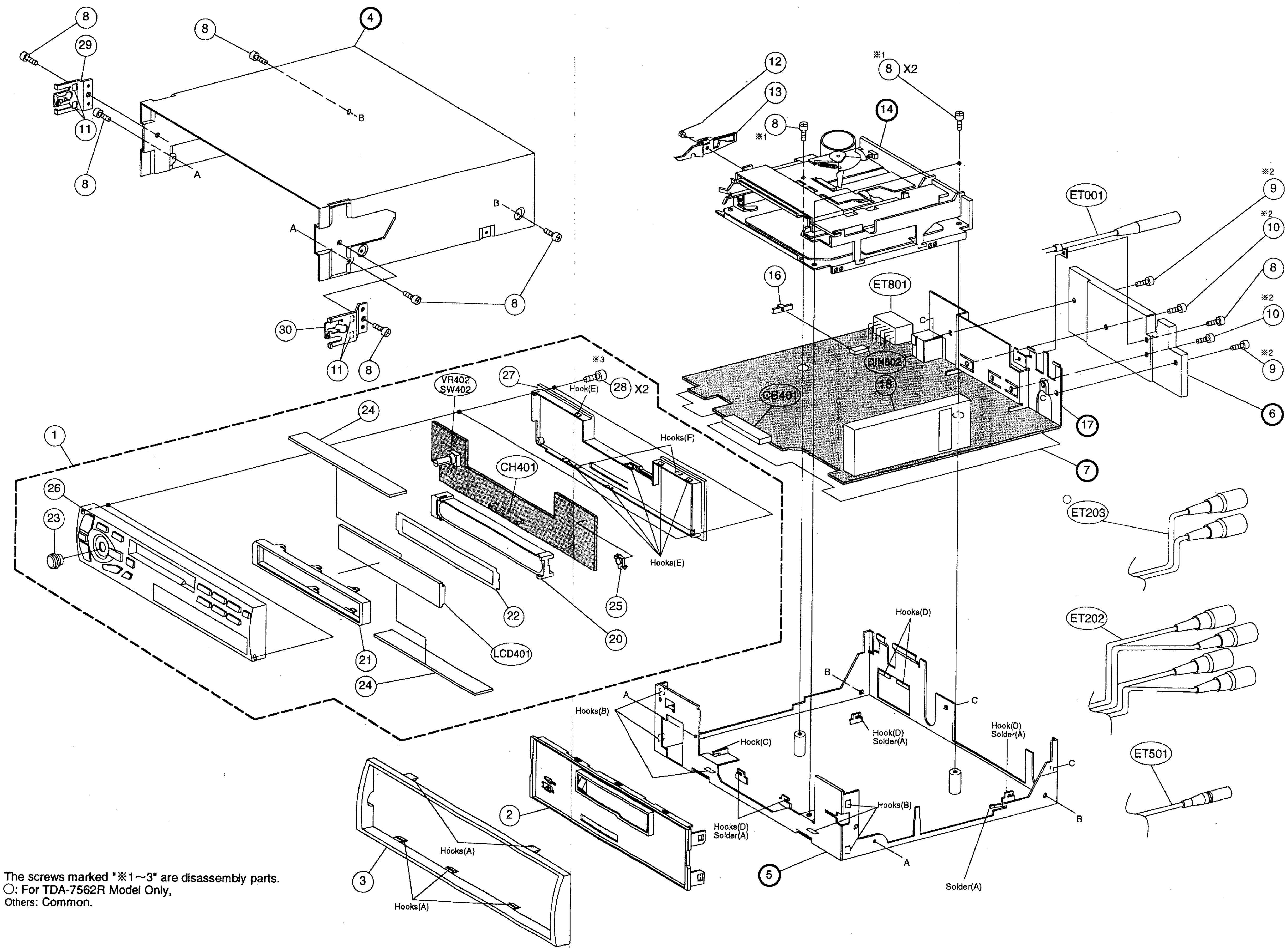
NOTE : ○: For TDA-7562R Model Only, △: For TDA-7560R Model Only, Others : Common.

Electrical Parts List
(Only Difference for Cassette Deck Mechanism)

NOTE : For the parts not mentioned, refer to the Service Manual for TDA-7659R (Part No. 68E23869S01).

Model	TDA-7659R		TDA-7562R/TDA-7560R	
Symbol No.	Part No.	Description	Part No.	Description
GR Control P.W.Board				
Capacitor				
E3501	23S75372W08	ELY., 100μF / 16V	23S75372W18	ELY., 100μF / 25V
Resistor				
R3119	06S64995F32	CP., 130 ohm 1/10W	06S64995F35	CP., 180 ohm 1/10W
GR Audio P.W.Board				
Resistors				
R3102	06S64996F12	CP., 270K ohm 1/10W	06S64996F15	CP., 360K ohm 1/10W
R3103	06S64995F79	CP., 12K ohm 1/10W	06S64995F81	CP., 15K ohm 1/10W
R3104	06S64995F80	CP., 13K ohm 1/10W	06S64995F81	CP., 15K ohm 1/10W
R3106	06S64995F80	CP., 13K ohm 1/10W	06S64995F81	CP., 15K ohm 1/10W
R3107	06S64995F79	CP., 12K ohm 1/10W	06S64995F81	CP., 15K ohm 1/10W
R3108	06S64996F12	CP., 270K ohm 1/10W	06S64996F15	CP., 360K ohm 1/10W
Miscellaneous				
HD1101	88T85509W01	Head	88T85509W02	Head
M1502	01V74500W23	Assy., Sub Motor (7V-370mA)	01V91700W81	Assy., Sub Motor (7V-370mA)

Exploded View (Cabinet)


1
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VR402
SW402
CH401
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※3
28 X2
Hook(E)
Hooks(F)
Hooks(E)
25
22
20
21
LCD401
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8 X2
14
16
ET801
DIN802
CB401
18
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ET001
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9
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8
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17
6
7
ET203
ET202
ET501
Hooks(D)
Hook(C)
Hooks(B)
Hook(D)
Solder(A)
Hooks(D)
Solder(A)
Hooks(B)
Solder(A)
Hooks(A)
Hooks(A)
2
3
5

NOTES: The screws marked "※1~3" are disassembly parts.
○: For TDA-7562R Model Only,
Others: Common.

Cabinet Assembly Parts List

NOTE:Parts without part number are not supplied.

Symbol No.		Index	Part No.	Description
○	1	3-A	01E27914S01	Assy., Nose Unit
△	1	3-A	01E27778S01	Assy., Nose Unit
	2	5-D	13C10637Y01	Assy., Front Escutcheon
	3	5-C	33C10618Y01	Face, Plate
	8		03E09416S05	Screw, MCH-TPT (M2.6X6)
	9		03E22117S01	Screw, MCH-TPT (M2.6X8)
	10	2-G	03E22118S01	Screw, MCH-TPT (M2.6X14)
	11		26E20540S01	Sheet, Switch
	12	1-E	41E27727S01	Spring, Lever Door
	13	1-E	45E27738S01	Lever, Door
	16	2-F	45E22019S01	Lever, Pre-Switch
	18	3-F	77E27449S01	FM/MW/LW Tuner Unit, MB4R6050 (FE001)
	20	4-D	01E27915S01	Assy., Case LCD
	21	4-C	15E27861S01	Cover, LCD
	22	4-D	26A80519W03	Reflector, Sheet
	23	3-A	36B10628Y01	Knob, Rotary
	24		75T85247W01	Rubber, Electric
	25	4-D	15A80548W01	Cover, LED
○	26	3-A	13D10636Y08	Assy., Nosepiece
△	26	3-A	13D10636Y09	Assy., Nosepiece
	27	3-D	13D10632Y01	Nose, Bottom
	28	3-D	03E22134S01	Screw, TPG (M1.7X10)
	29	2-B	07D91595W01	Assy., Bracket Side (L)
	30	2-C	07D91595W02	Assy., Bracket Side (R)

Symbol No.	Index	Part No.	Description

Disassembly Instructions

1. Removal of Nose Unit

(1) Refer to the Owner's Manual (Part No. 68P91666W74, 75).

2. Removal of Front Escutcheon

(1) After removal of Top Cover, remove five Hooks (A). .... Hooks (A) (5-C, 5-D)

(2) Remove the Face Plate.

(3) Remove six Hooks (B). .... Hooks (B) (4-D, 5-F)

3. Removal of Cassette Deck

(1) After removal of Front Escutcheon, remove three screws No.8. .... Screws No. 8 (※1) (1-E, 1-F)

(2) Remove the Hook (C). .... Hook (C) (4-E)

(3) Disconnect the connector from Main P.W. Board.

4. Removal of Main P.W. Board

(1) After removal of Cassette Deck, remove four screws No. 9, 10, and remove the Heat Sink. .... Screws No. 9, 10 (※2) (2-G, 3-G)

(2) Remove five points of Solder (A) and six Hooks (D). .... Solder (A) (4-F, 5-E, 5-F)
Hooks (D) (4-F, 5-E)

(3) Main P.W. Board with Bracket IC can be removed completely.

5. Removal of Front P.W. Board

(1) After removal of Nose Unit, remove the Rotary Knob and two screws No. 28. .... Screws No. 28 (※3) (3-D)

(2) Remove six Hooks (E), and remove the Nosepiece. .... Hooks (E) (3-D, 3-E)

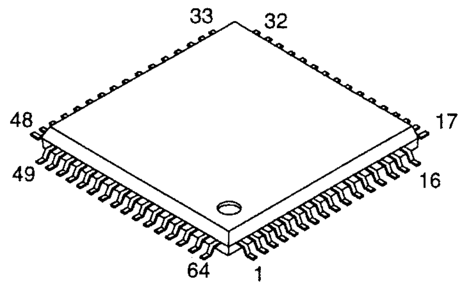
(3) Remove two Hooks (F). .... Hooks (F) (3-E)

NOTE: For the screws No., Hook and Solder, refer to the Exploded View (Cabinet).

Semi - Conductor Lead Identifications

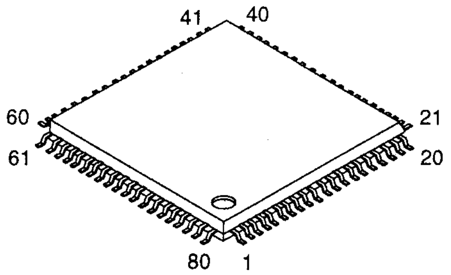
NOTE : For the parts not mentioned, refer to the Schematic Diagram.

85151W37 : IC501



PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	NC	—	17	MTR FAST	I	34	BUS OUT	O	51	ENCODER2	I
2	NOSE PWR	O	18	M.S.DET	I	35	$\overline{\text{RESET}}$	I	52	○ BBE1	O
3	BUZZER	O	19	METAL	I	36	REMOCON	I		△ NC	—
4	DTS START	O	20	PACK IN	I	37	BUS IN	I	53	○ BBE2	O
5	$\overline{\text{DTS MUTE}}$	I	21	REV DET	I	38	ACC DET	I		△ NC	—
6	DTS CE	O	22	MODE SW	I	39	BAT DET	I	54	○ BBE3	O
7	NC	—	23	FOR DET	I	40	V_{DD}	—		△ NC	—
8	ADJ EV-DATA	O	24	GND	—	41	X2	O	55	AV_{DD}	—
9	GND	—	25	PAUSE SW	I	42	X1	I	56	AV_{REF}	—
10	$\overline{\text{DOLBY B}}$	O	26	MUTE	O	43	GND	—	57	LCD DO	I
11	○ $\overline{\text{DOLBY C}}$	O	27	NFP-1	O	44	NC	—	58	LCD DI	O
	△ NC	—	28	NFP-2	O	45	GND	—	59	LCD CLK	O
12	L.O.FAST	O	29	EV-DATA	O	46	GND	—	60	LCD CE	O
13	FOR/ $\overline{\text{REV}}$	O	30	EV-CLK	O	47	$\overline{\text{NOSE-DET}}$	I	61	LCD RST	O
14	O.MOTOR	O	31	PWR IC	O	48	IN INT	I	62	DTS STS	I
15	R-IN	O	32	PWR ON	O	49	MODEL	I	63	DTS CMD	O
16	F-IN	O	33	NC	—	50	ENCODER1	I	64	$\overline{\text{DTS CLK}}$	O

85312W65 : IC502



PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	NC	—	21	NC	—	41	NC	—	61	NC	—
2	NC	—	22	NC	—	42	NC	—	62	NC	—
3	PULL-DOWN	I/O	23	NC	—	43	NC	—	63	DTS CE	I
4	AV_{SS}	—	24	NC	—	44	NC	—	64	NC	—
5	$\overline{\text{SD SW}}$	O	25	NC	—	45	NC	—	65	NC	—
6	IF MUTE	O	26	NC	—	46	NC	—	66	NC	—
7	AV_{REF}	—	27	NC	—	47	NC	—	67	$50K_{REF}$	O
8	RxD	I	28	NC	—	48	NC	—	68	V_{DD}	—
9	T_XD	O	29	NC	—	49	NC	—	69	X2	O
10	NC	—	30	NC	—	50	NC	—	70	X1	I
11	DTS COMMAND	I	31	NC	—	51	NC	—	71	GND	—
12	DTS STATUS	O	32	NC	—	52	NC	—	72	NC	—
13	DTS CLOCK	I	33	V_{SS}	—	53	NC	—	73	NC	—
14	$\overline{\text{DTS MUTE}}$	O	34	NC	—	54	PLL DI	I	74	AV_{DD}	—
15	DTS START	I	35	NC	—	55	PLL CLK	O	75	AV_{REF}	
16	NC	—	36	NC	—	56	PLL DO	O	76	S/M	I
17	I2C DATA	I/O	37	NC	—	57	PLL CE	O	77	M/P	I
18	I2C CLOCK	I/O	38	NC	—	58	NC	—	78	GND	—
19	DAVN	O	39	NC	—	59	NC	—	79	FM SD/ST	I
20	RDS RESET	O	40	NC	—	60	$\overline{\text{RESET}}$	I	80	AM SD	I

NOTE : ○ : For TDA-7562R Model Only, △ : For TDA-7560R Model Only, Others :Common.

Cassette Deck Mechanism Assembly Parts List

NOTE : For the parts not mentioned, refer to the Service Manual for GR-S SERIES • ADDENDUM & REVISED (II) (Part No. 68E26177S01).

Model	GR75S42Y			GR75S230		
Symbol No.	Index	Part No.	Description	Index	Part No.	Description
4	3-D	01A90342W02	Assy., Riv. Select Swing		01A90342W03	Assy., Riv. Select Swing
5	2-F	01A71714W01	Assy., Riv. RF Lever A		01A90340W02	Assy., Riv. RF Lever A
6	2-E	01A90341W02	Assy., Riv. RF Lever B		01A90341W01	Assy., Riv. RF Lever B
26	5-B	07B71778W01	Holder, Cassette		07B40012W01	Holder, Cassette (D)
27	3-C	45A71736W03	Lever, Pack In Switch		45A71736W01	Lever, Pack In Switch
34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)		01A90346W03	Assy., Riv. Eject Arm (R)
36	4-A	01A71712W01	Assy., Riv. Plate Base		01A40024W03	Assy., Riv. Plate Base
38		01A71783W10	Assy., Flywheel		01A71783W01	Flywheel
42	3-F	44B71726W01	Rack, Mode		44C90318W01	Rack, Mode (B)
45	2-C	45B90320W02	Lever, Select		45B90320W01	Lever, Select
46	3-E	45A71737W03	Lever, Mode Switch		45A71737W02	Lever, Mode Switch
47	3-E	45A71733W03	Lever, Lock		45A71733W02	Lever, Lock
62	3-B	45A90322W02	Lever, Eject Arm A		45A90322W01	Lever, Eject Arm A
Miscellaneous						
501	2-B	88T75612W03	Head		88T85509W02	Head
502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)		01V84200W63	Assy., Main Motor (6V-90mA)
503	3-C	01V74500W23	Assy., Sub Motor (7V-370mA)		01V91700W81	Assy., Sub Motor (7V-370mA)

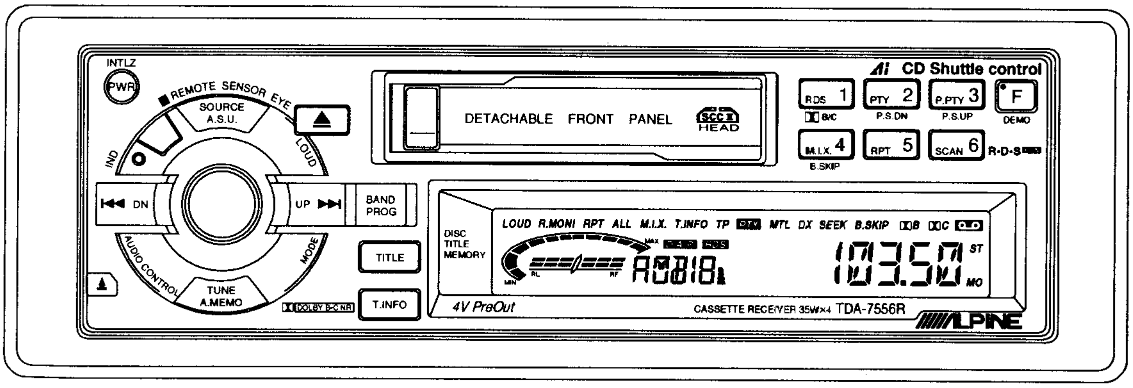
3+3

ALPINE SERVICE MANUAL

FM/MW/LW/RDS Cassette Receiver

CD Shuttle Controller

- The model described in this manual is developed from Model TDM-7531R/TDM-7532R/TDM-7535R. For information that is not mentioned in this service manual, refer to the Service Manual • TDM-7531R/TDM-7532R/TDM-7535R (Part No. 68E21961S01).
- For the cassette deck mechanism parts (GR75S120/130) of this model, refer to the Service Manual • GR-S Series (Part No. 68E23241S01).


INTLZ
PWR
REMOTE SENSOR EYE
SOURCE A.S.U.
LOUD
IND
DN
UP
BAND PROG
AUDIO CONTROL
MODE
TUNE A.MEMO
TITLE
T.INFO
DETACHABLE FRONT PANEL
SCC HEAD
CD Shuttle control
RDS 1
PTY 2
P.PTY 3
F
P.S.DN
P.S.UP
DEMO
M.I.X. 4
RPT 5
SCAN 6
B.SKIP
R·D·S
DISC TITLE MEMORY
LOUD R.MONI RPT ALL M.I.X. T.INFO TP MTL DX SEEK B.SKIP
103.50
ST
MO
4V PreOut
CASSETTE RECEIVER 35W×4 TDA-7556R
ALPINE

(TDA-7556R)

TDA-7556R/TDA-7659R/
TDA-7552R/TDA-7550R

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Tuner Schematic Diagram ——— Refer to the Service Manual • TDM-7531R/TDM-7532R/TDM-7535R (Part No. 68E21961S01).

Specifications

NOTE: Refer to the Service Manual • TDM-7531R/7532R/7535R (Part No. 68E21961S01) for description not mentioned in this manual.

TAPE PLAYER

S/N Ratio (Volume Display 22 Position) .... Dolby OFF: 52dB
Dolby B • NR : 60.5dB
Dolby C • NR : 67dB (○●△)

GENERAL

Power Output (T.H.D. 10%)/Impedance .... 16W/ch/4ohm (○△□)
Pre Output Voltage/Impedance 1V/10kohm
Dimensions (W×H×D) .... Chassis : 178×50×152mm
Nose : 170×46×18mm
Weight 1.4kg

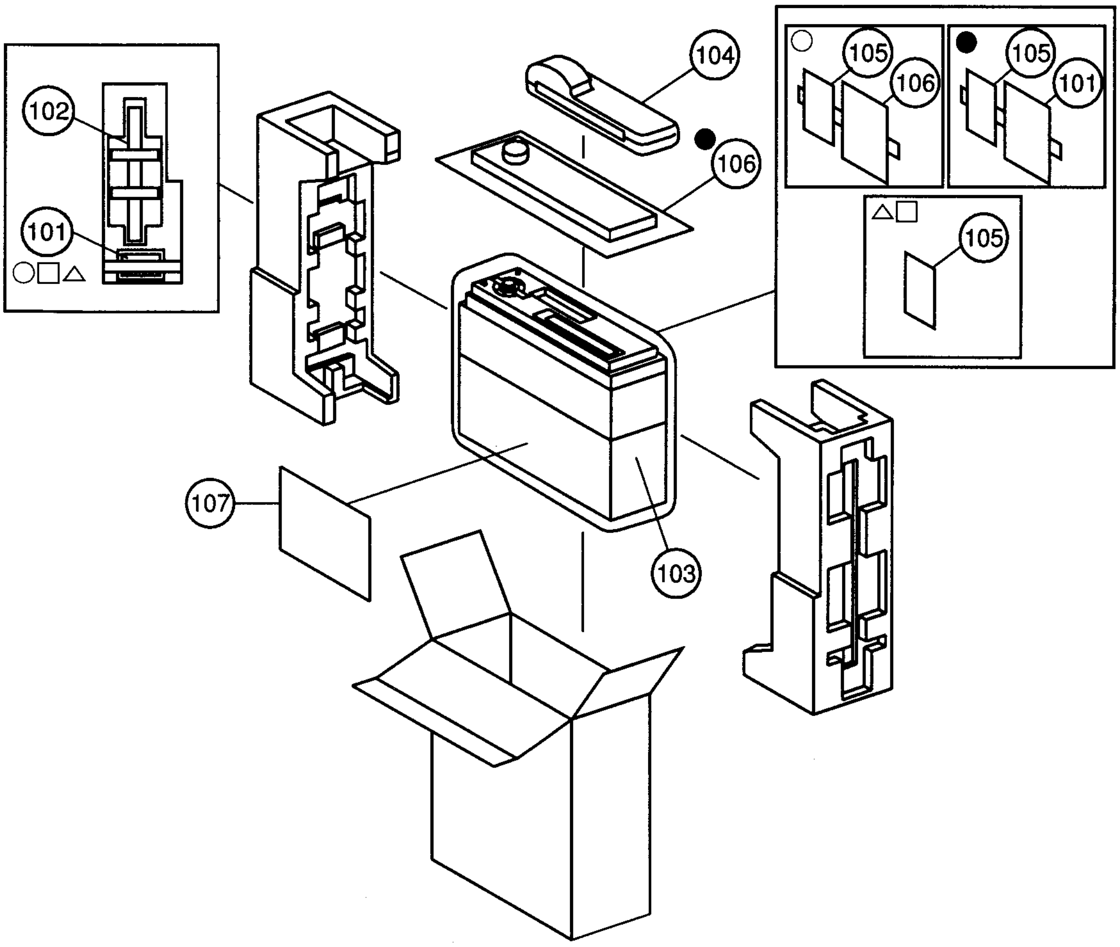
NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.
○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only,
□: For TDA-7550R Model Only Others : Common.

Packing Assembly Parts List

Symbol	No.	Part No.	Description
	101-1	02B47353F01	Nut, Hex. (M5)
	101-2	03S72235F13	Screw, Countersink (M5X8)
	101-3	46A42363F01	Stud, Bolt
	101-4	36A11113W01	Cap, Rubber (A)
	101-5	03A11112W01	Bolt, Hex. (M5) (A)
	101-6	01T75363W01	ISO / JASO Antenna Adapter
○	101-7	60S70585F01	Battery, Lit. 3V (CR2025)
●	101-7	60T55630W01	Battery, MGN R03(NB)UM-4
	102	07B64552F01	Bracket, Strap Receiver
	103	15D50406W01	Case, Inner
	104	15D60773W01	Carrying, Case
○	105	01T85297W01	Assy., ISO Wire
●	105	01T85297W02	Assy., ISO Wire
△	105	01T85297W01	Assy., ISO Wire
□	105	01T85297W01	Assy., ISO Wire
○	106	01T75235W05	Assy., Card Remocon
●	106	01T75436W01	Unit, Remocon
	107	68P80683W20	Owner's Manual

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Packing Method View

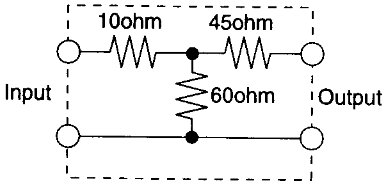


NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Adjustment Procedures

1. FM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
Input
60ohm
Output

For 50 ohm FM Signal Generator

Figure 1

(2) Connections

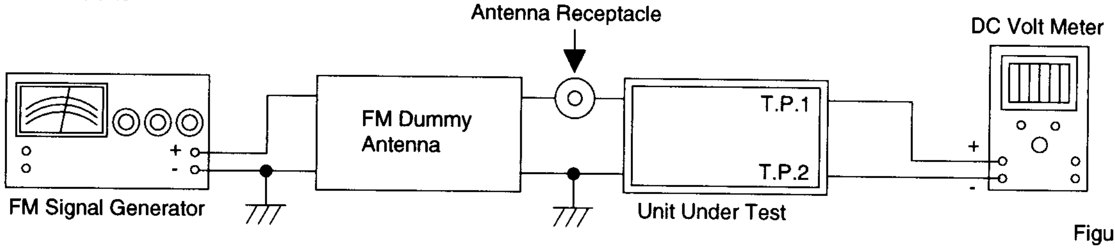

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.1
T.P.2
+
-
FM Signal Generator
Unit Under Test

Figure 2

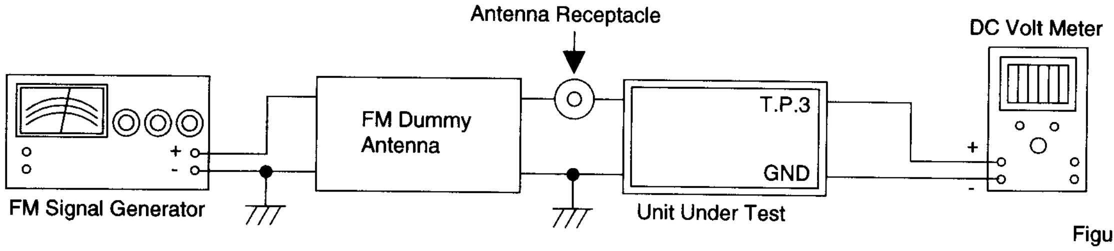

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.3
GND
+
-
FM Signal Generator
Unit Under Test

Figure 3

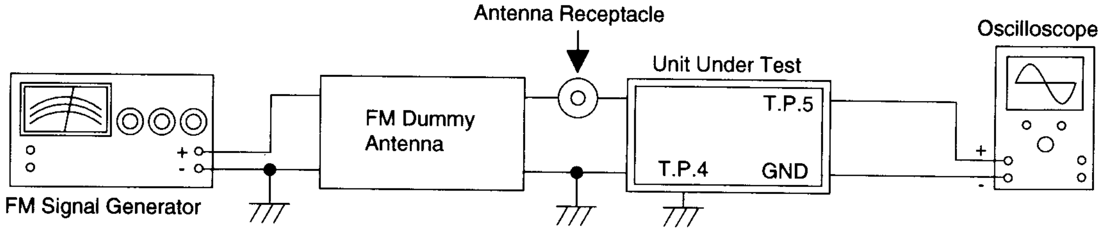

Antenna Receptacle
Oscilloscope
Unit Under Test
FM Dummy Antenna
T.P.5
T.P.4
GND
+
-
FM Signal Generator

Figure 4

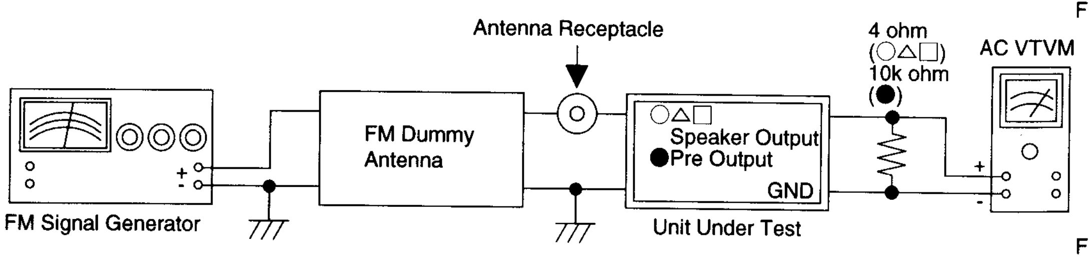
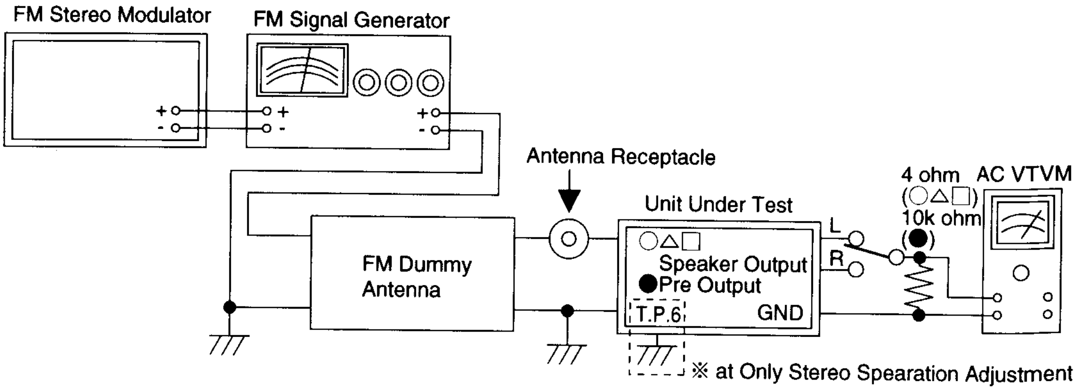

Antenna Receptacle
4 ohm (○△□)
10k ohm (●)
AC VTVM
FM Dummy Antenna
○△□ Speaker Output
●Pre Output
GND
+
-
FM Signal Generator
Unit Under Test

Figure 5


FM Stereo Modulator
FM Signal Generator
+
-
Antenna Receptacle
Unit Under Test
4 ohm (○△□)
10k ohm (●)
AC VTVM
L
R
FM Dummy Antenna
○△□ Speaker Output
●Pre Output
T.P.6
GND

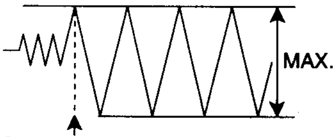
※ at Only Stereo Spearation Adjustment

Figure 6

(3) Control Settings

Power Switch	ON
Fader Control	Center Position
Balance Control	Center Position
Treble/Bass Control	Center Position
Band Switch	FM
Others	OFF

(4) Adjustment Procedures

Step	Description		Connection	Signal Generator	Dial Control	Test Point		Adjustment
1	IF Adjustment		Figure 2	98.1MHz, 72dB (Mod. OFF)	98.1MHz	T.P.1 T.P.2		Adjust L2101 to 0±15mV.
2	Signal Meter Adjustment		Figure 3	98.1MHz, 46dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.3		Adjust VR2101 to 3.5±0.1V.
3	Seek Stop Adjustment		Figure 4	98.1MHz, 30dB (Mod. OFF)	98.1MHz	T.P.4 T.P.5		Adjust VR2104 for the waveform changing to maximum output. Figure : Waveform of T.P.5 output.  Stop the adjust VR2104 at this time.
4	Noise Level Adjustment	(1)	Figure 5	98.1MHz, 72dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	○△□ Speaker Output		Adjust VOLUME to obtain 2V output. This value is 0dB.
						●Pre Output		Adjust VOLUME to obtain 400mV output. This value is 0dB.
		(2)	Figure 5	98.1MHz, -19dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	○△□ Speaker Output		Adjust VR2105 to -25±3dB output at SG level minimum.
						●Pre Output		
5	Stereo Blend Adjustment (Lch)		Figure 6	98.1MHz, 40dB (Mod. 1kHz, Dev. 36kHz, Stereo, Lch Only)	98.1MHz	○△□ Speaker Output		Adjust VR2102 for Lch and Rch output level difference to be 8±2dB.
						●Pre Output		
6	Stereo Separation Adjustment (Lch)		Figure 6	98.1MHz, 72dB (Mod. 1kHz, Dev. 36kHz, Stereo, Lch Only)	98.1MHz	○△□ Speaker Output	T.P.6	Adjust VR2103 for Rch output to be minimum, and confirm Lch and Rch output level difference is more than 20dB.
						● Pre Output		
7	Stereo Blend Adjustment (Rch)		Figure 6	98.1MHz, 40dB (Mod. 1kHz, Dev. 36kHz, Stereo, Rch Only)	98.1MHz	○△□ Speaker Output		Proceed same adjustment under step 5.
						●Pre Output		
8	Stereo Separation Adjustment (Rch)		Figure 6	98.1MHz, 72dB (Mod. 1kHz, Dev. 36kHz, Stereo, Rch Only)	98.1MHz	○△□ Speaker Output	T.P.6	Proceed same adjustment under step 6 by alternating Lch and Rch.
						● Pre Output		

NOTE: ○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only, □: For TDA-7550R Model Only, Others : Common.

2. TAPE PLAYER SECTION

(1) Connection

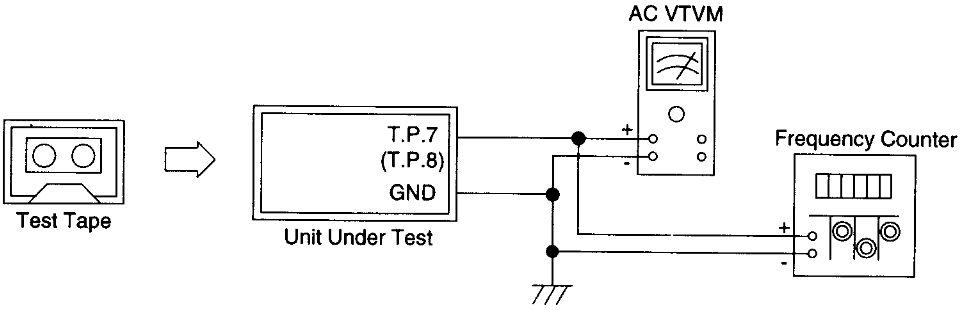


Figure 7

(2) Control Settings

Power Switch .... ON
Fader Control .... Center Position
Balance Control .... Center Position
Treble/Bass Control .... Center Position
Others .... OFF

(3) The necessaries for adjustment

GR-S Extension Cord
Assy., EX Cord Kit for GR-S Mechanism
Part No. 01E23255S01
See Adjustment Locations (Figure 10).

(4) Adjustment Procedures

Step	Description	Test Tape	Connection	Test Point	Adjustment Point	Adjustment
1	Head Azimuth Adjustment	MTT-114NB (14kHz)	Figure 7	T.P.7 (Lch) T.P.8 (Rch)	Head Azimuth Adjustment Screws (Figure 8)	Adjust for Max. and same level output at Forward and Reverse positions.
2	Dolby Level Adjustment	MTT-150 (400Hz)	Figure 7	T.P.7 (Lch) T.P.8 (Rch)	VR201 (Lch) VR202 (Rch)	Adjust for 388mV ±1dB at T.P.7 (Lch) and T.P.8 (Rch).
3	Tape Speed Adjustment	MTT-111N (3kHz)	Figure 7	T.P.7 (Lch) or T.P.8 (Rch)	Tape Speed Adjustment (Figure 9)	Adjust for 2,970 to 3,090Hz at T.P.7 (T.P.8).

Adjustment Locations

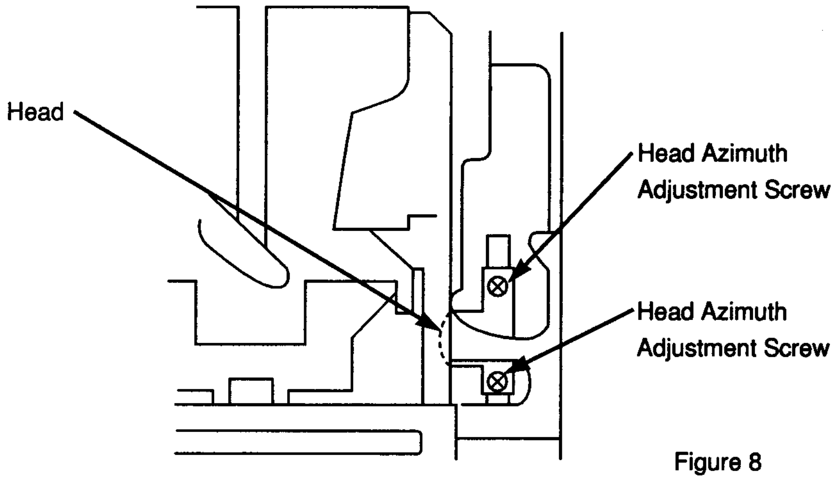

Head
Head Azimuth Adjustment Screw
Head Azimuth Adjustment Screw

Figure 8

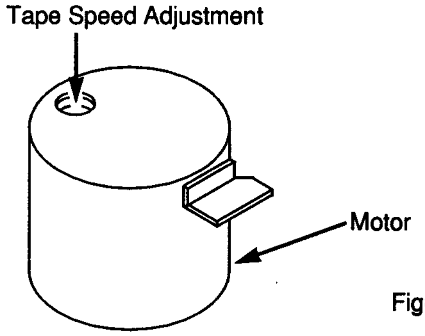

Tape Speed Adjustment
Motor

Figure 9

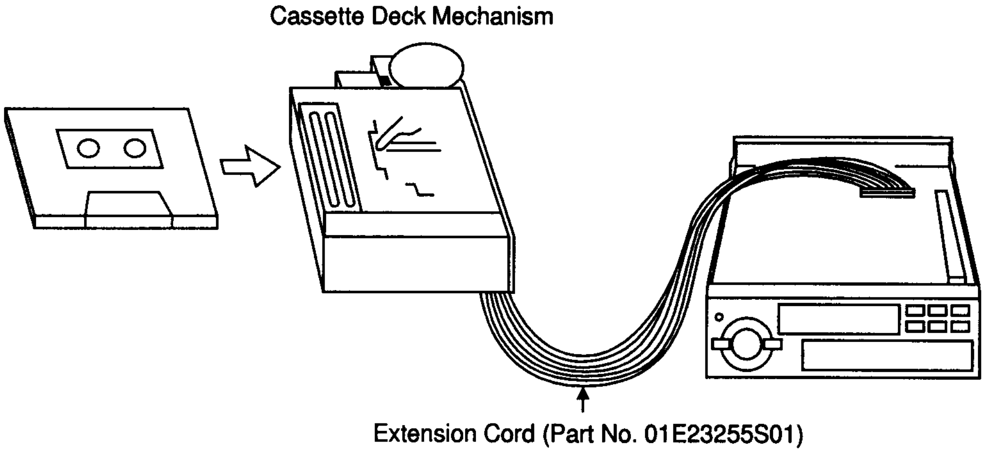
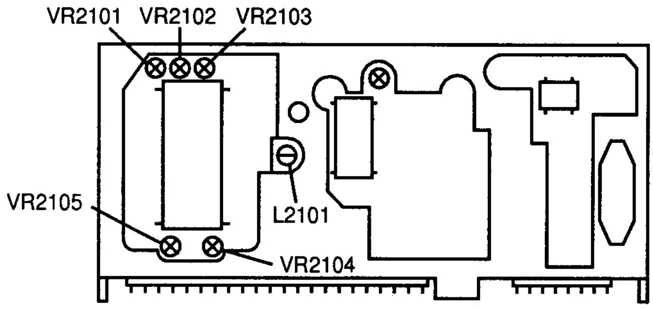

Cassette Deck Mechanism
Extension Cord (Part No. 01E23255S01)

Figure 10


VR2101
VR2102
VR2103
VR2105
L2101
VR2104

FM/MW/LW Tuner Unit (FE001)

NOTE: For the Adjustment parts (VR201, VR202) and Test Points (T.P.1 ~6), refer to the Parts Layout on P.C. Boards and Wiring Diagram.

Description of IC Terminal

85151W08 : IC501

No.	Symbol		I/O	Terminal Description
1	○●	NFP EV DATA	O	E.VOL DATA output terminal for ADJ-NFP.
	△□	NC	—	No connection terminal.
2		NOSE PWR	O	Power Control signal output terminal to NOSE.
3	○●△	BUZZER	O	Guide Tone signal output terminal.
	□	NC	—	No connection terminal.
4		DTS START	O	Data START signal output terminal to DTS μ-COM.
5		$\overline{\text{DTS MUTE}}$	I	Mute signal input terminal from DTS μ-COM.
6		DTS CE	O	CE signal output terminal to DTS μ-COM.
7		ALARM	O	ALARM signal output terminal.
8	○●	NFP EV CE	O	E.VOL CE output terminal for ADJ-NFP.
	△□	NC	—	No connection terminal.
9		GND	—	GND terminal.
10		$\overline{\text{DOLBY B}}$	O	Dolby B • NR ON/OFF signal output terminal. H: OFF / L: ON
11	○●△	$\overline{\text{DOLBY C}}$	O	Dolby C • NR ON/OFF signal output terminal. H: OFF / L: ON
	□	NC	—	No connection terminal.
12		L.O. FAST	O	Gain Control signal output terminal for MS IC at CUE/REV. H: CUE/REV, L: PLAY
13		FOR/$\overline{\text{REV}}$	O	Tape Direction indicator output terminal. H: FOR / L: REV
14		O.MOTOR	O	Motor Rotation Control output terminal. H: ROTATE / L: STOP
15		R-IN	O	Sub Motor Rotation Control output terminal. R-IN: H (CCW)/L (CW)/H (BRAKE)/L (OFF), F-IN: L (CCW)/H (CW)/L (BRAKE)/H (OFF)
16		F-IN	O	
17		MTR FAST	I	Main Motor Rotation Control input terminal. H: High Speed / L: Stabilization
18		M.S. DET	I	Music Sensor Detection signal input terminal.
19		METAL	I	Metal Tape Detection terminal. H: METAL / L: NORMAL
20		PACK IN	I	Pack In Detection terminal. H: PACK IN / L: PACK OUT
21		REV.DET	I	REV REEL Rotation Detection input terminal.
22		MODE SW	I	Mode Detection input terminal.
23		FOR DET	I	FOR REEL Rotation Detection input terminal.
24		GND	—	GND terminal.
25		PAUSE SW	I	Pause Mode Detection input terminal.
26		MUTE	O	Audio Mute signal output terminal.
27		NFP-1	O	NFP Control signal output terminal. H: FAD-F / L: OTHERS
28		NFP-2	O	NFP Control signal output terminal. H: FAD-R / L: OTHERS
29		EV-DATA	I/O	Serial Data output to E.VOL/ACK input from E.VOL terminal.
30		EV-CLK	O	Serial Clock output terminal to E.VOL.
31		PWR IC	O	Stand-by Control output terminal for Power IC.
32		PWR ON	O	Power Control signal output terminal.
33		NC	—	No connection terminal.
34		BUS OUT	O	Signal output terminal to BUS I/F.
35		$\overline{\text{RESET}}$	I	System Reset input terminal.
36		REMOCON	I	Remocon Data input terminal.
37		BUS IN	I	Signal input terminal from BUS I/F.
38		ACC DET	I	ACC Detection signal input terminal.
39		BAT DET	I	BATT Detection signal input terminal.
40		VDD	—	Power Supply terminal.

NOTE: ○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only,
□: For TDA-7550R Model Only, Others : Common.

No.	Symbol	I/O	Terminal Description
41	X2	O	System Clock OSC connection terminal. (8.38MHz)
42	X1	I	
43	GND	—	GND terminal.
44	NC	—	No connection terminal.
45	GND	—	GND terminal.
46			
47	Ai-NET $\overline{\text{IN}}$/OUT	I	Audio signal switching input terminal. H: Outer AMP / L: Inner AMP
48	○● $\overline{\text{IN}}$ INT	I	Mutual Reset IN-INT signal input terminal.
	△□ PULL-DOWN	—	Pull-Down terminal.
49	MODEL	I	A/D input terminal for Model Set Up.
50	ENCODER 1	I	Encoder Data input terminal.
51	ENCODER 2	I	
52	GND	—	GND terminal.
53			
54	NOSE-DET	I	Nose Detection input terminal.
55	V_{DD}	—	Power Supply terminal.
56			
57	LCD DO	I	Serial Data input terminal from LCD Driver.
58	LCD DI	O	Serial Data output terminal to LCD Driver.
59	LCD CLK	O	Serial Clock output terminal to LCD Driver.
60	LCD CE	O	Serial Data CE signal output terminal to LCD Driver.
61	LCD RST	O	Reset signal output terminal to LCD Driver.
62	DTS STS	I	Serial Data input terminal from DTS μ-COM.
63	DTS CMD	O	Serial Data output terminal to DTS μ-COM.
64	$\overline{\text{DTS CLK}}$	O	Serial Clock output terminal to DTS μ-COM.

NOTE: ○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only,
□: For TDA-7550R Model Only, Others : Common.

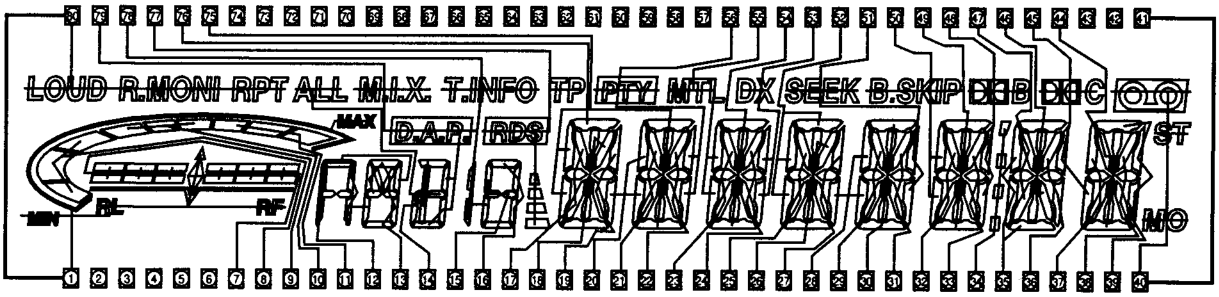
85088W01 : IC502

No.	Symbol	I/O	Terminal Description
1	LW	O	LW band selection output terminal.
2	LO/$\overline{\text{DX}}$	O	Local/DX control output terminal. H: During SEEK LOCAL
3	NC	—	No Connection terminal.
4	AV_{SS}	—	GND terminal for A/D converter.
5	$\overline{\text{LPF}}$ SW	O	LPF time constant switching terminal at AF CHECK.
6	IF MUTE	O	IF Mute output terminal.
7	AV_{REF1}	—	Reference voltage terminal for A/D Converter.
8	RXD	I	RDS Monitor input terminal (Pull-Up terminal).
9	TXD	O	RDS Monitor output terminal (No Connection terminal).
10	SYNC	O	SYNC signal output terminal (No Connection terminal).
11	PLL CLK	O	Clock output terminal to PLL.
12	PLL DATA	O	Data output terminal to PLL.
13	PLL CE	O	Data communication control signal output terminal to PLL.
14	DTS MUTE	O	Audio mute output terminal.
15	DTS START	I	DTS data start input terminal.
16	DTS CMD	I	Command input terminal from Main μ-COM.
17	DTS STS	O	Status output terminal to Main μ-COM.
18	DTS CLK	I	Communication clock signal input terminal from Main μ-COM.

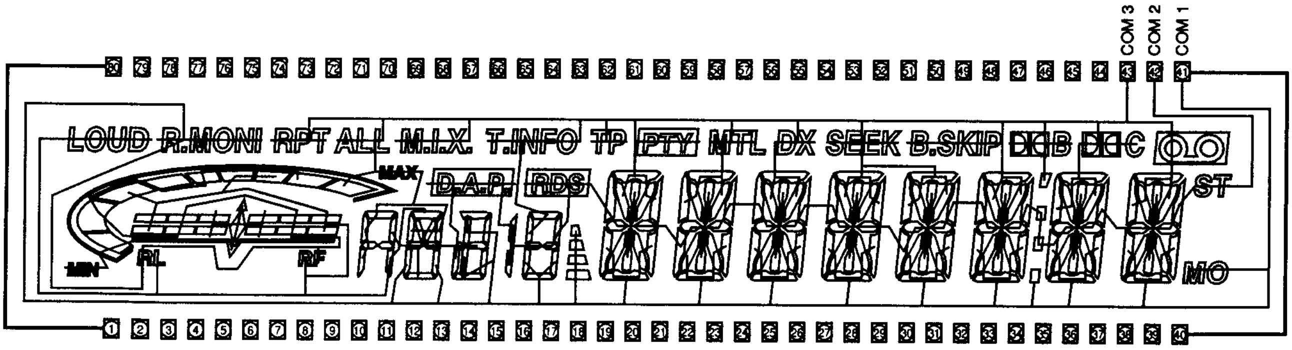
No.	Symbol	I/O	Terminal Description
19 〜 32	NC	—	No Connection terminal.
33	GND	—	GND terminal.
34 〜 57	NC	—	No Connection terminal.
58	FM/$\overline{\text{AM}}$	O	FM/AM mode switching signal output terminal. H: FM
59	AUDIO IN	I	Audio xerox Detection terminal.
60	RESET	I	System reset input terminal.
61	RDS CLK	I	RDS clock input terminal from RDS Decoder.
62	RDS DATA	I	RDS data input terminal from RDS Decoder.
63	DTS CE	I	DTS CE input terminal.
64 〜 66	NC	—	No Connection terminal.
67	50K REF	O	L.P.F. switching output terminal at RDS mode.
68	VDD	—	Power supply terminal.
69	X2	—	System clock OSC connection terminal. (4.9152 MHz)
70	X1	—	
71	GND	—	GND terminal.
72	NC	—	No Connection terminal.
73	PLL DATA I	I	PLL Data input terminal.
74	AVDD	—	Analog power supply terminal for A/D converter.
75	AVREF0	—	Reference voltage terminal for A/D converter.
76	S.METER	I	Signal meter voltage input terminal.
77	A/I	I	Port detects adjoining rejection interference of station.
78	M.P	I	Port detects multi path interference of station.
79	ST	I	ST signal input terminal.
80	SD	I	Station detector signal input terminal.

LCD Display

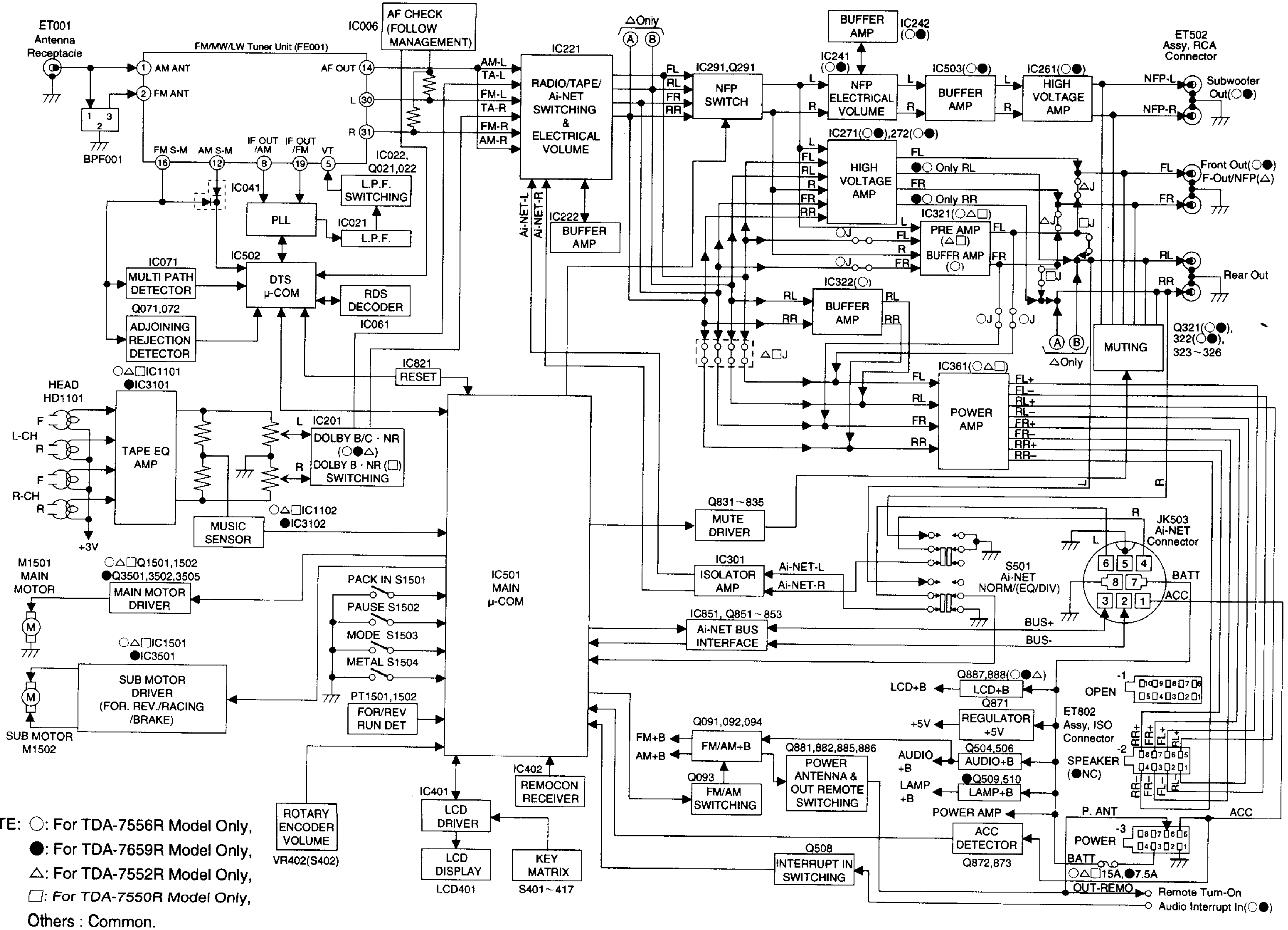
SEGMENT


LOUD
R.MONI
RPT
ALL
M.I.X.
T.INFO
TP
PTY
MTL
DX
SEEK
B.SKIP
DISC
MAX
D.A.P.
RDS
ST
MIN
RL
RF
MO

COMMON

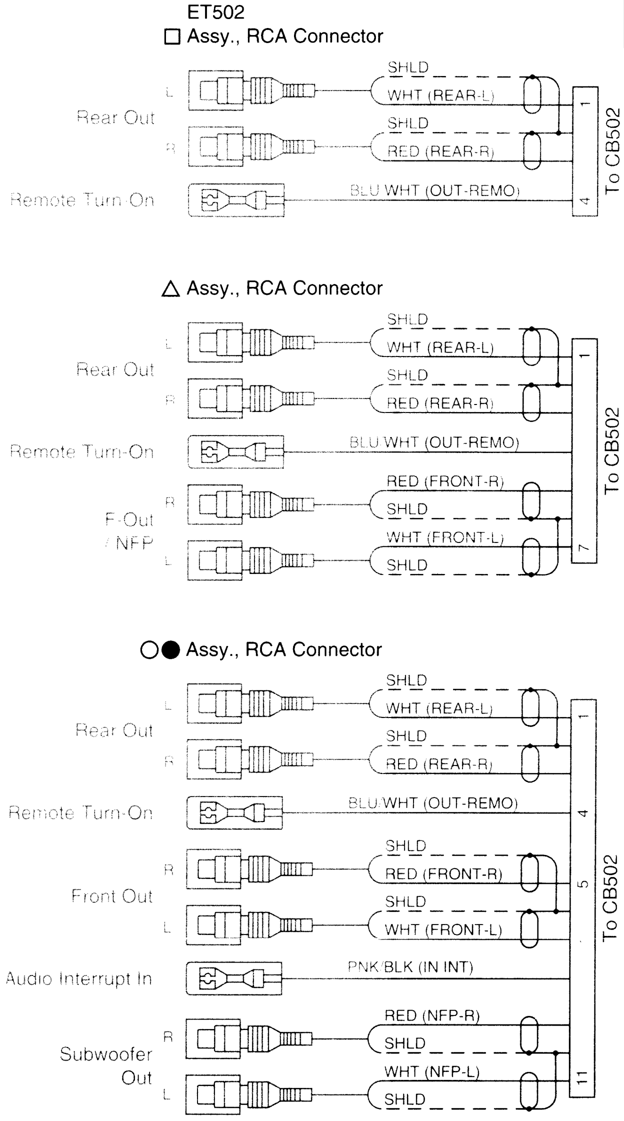

COM 3
COM 2
COM 1
LOUD
R.MONI
RPT
ALL
M.I.X.
T.INFO
TP
PTY
MTL
DX
SEEK
B.SKIP
DISC
MAX
D.A.P.
RDS
ST
MIN
RL
RF
MO

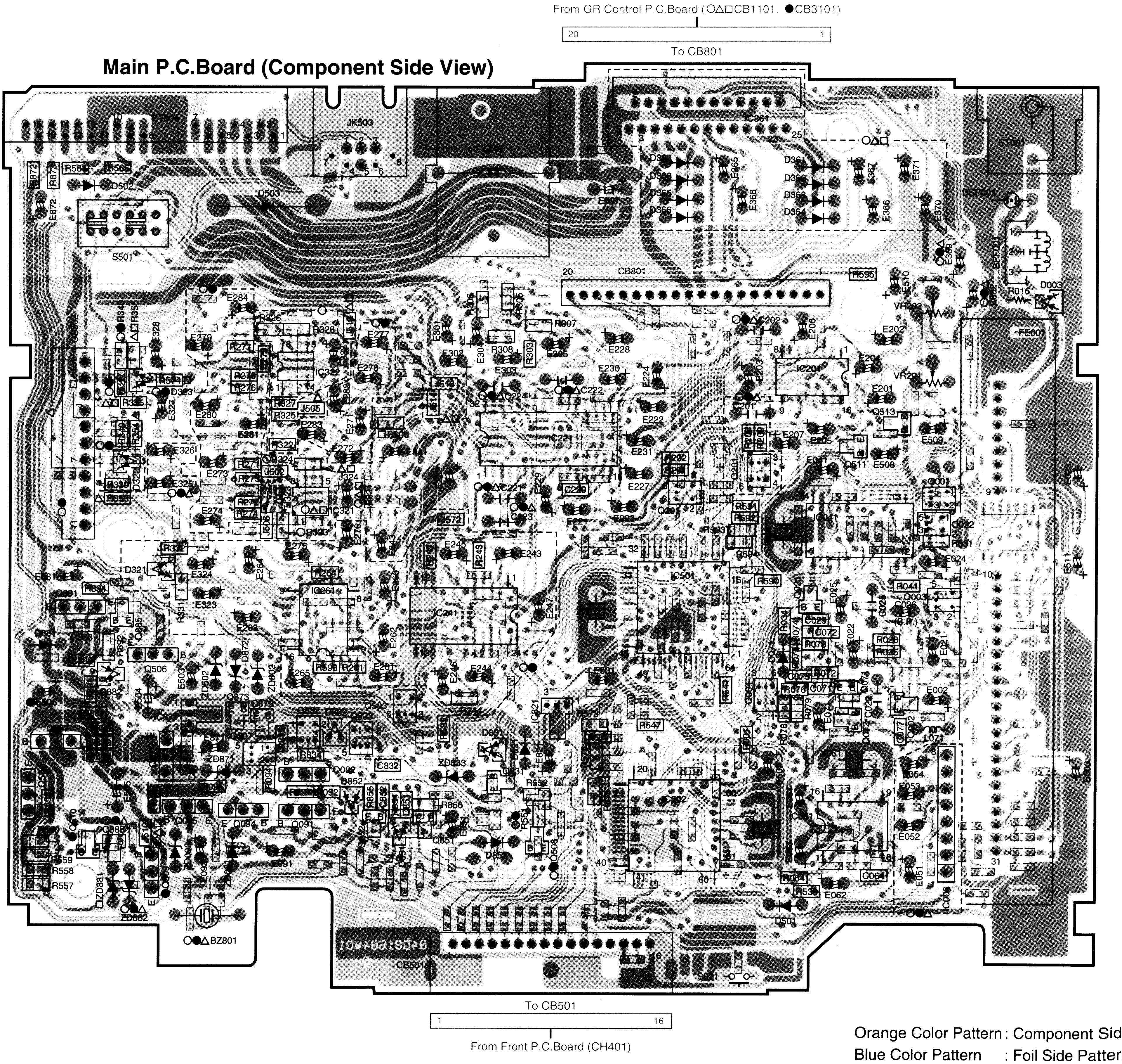
Block Diagram


ET001
Antenna
Receptacle
FM/MW/LW Tuner Unit (FE001)
1 AM ANT
2 FM ANT
BPF001
AF OUT 14
L 30
R 31
FM S-M 16
AM S-M 12
IF OUT /AM 8
IF OUT /FM 19
VT 5
IC006
AF CHECK (FOLLOW MANAGEMENT)
IC022, Q021,022
L.P.F. SWITCHING
IC041
PLL
IC021
L.P.F.
IC502
DTS μ-COM
RDS DECODER
IC061
IC071
MULTI PATH DETECTOR
Q071,072
ADJOINING REJECTION DETECTOR
AM-L
TA-L
FM-L
TA-R
FM-R
AM-R
IC221
RADIO/TAPE/ Ai-NET SWITCHING & ELECTRICAL VOLUME
Ai-NET-L
Ai-NET-R
IC222
BUFFER AMP
△Only
A
B
FL
RL
FR
RR
IC291,Q291
NFP SWITCH
BUFFER AMP
IC242 (○●)
IC241 (○●)
NFP ELECTRICAL VOLUME
IC503(○●)
BUFFER AMP
IC261(○●)
HIGH VOLTAGE AMP
ET502
Assy, RCA Connector
NFP-L
NFP-R
Subwoofer Out(○●)
IC271(○●),272(○●)
HIGH VOLTAGE AMP
●○ Only RL
●○ Only RR
IC321(○△□)
PRE AMP (△□)
BUFFR AMP (○)
○J
□J
△J
Front Out(○●)
F-Out/NFP(△)
Rear Out
IC322(○)
BUFFER AMP
△□J
IC361(○△□)
POWER AMP
FL+
FL−
RL+
RL−
FR+
FR−
RR+
RR−
MUTING
Q321(○●), 322(○●), 323~326
IC821
RESET
HEAD HD1101
L-CH
R-CH
F
R
+3V
○△□IC1101
●IC3101
TAPE EQ AMP
IC201
DOLBY B/C · NR (○●△)
DOLBY B · NR (□)
SWITCHING
MUSIC SENSOR
○△□IC1102
●IC3102
IC501
MAIN μ-COM
Q831~835
MUTE DRIVER
IC301
ISOLATOR AMP
Ai-NET-L
Ai-NET-R
IC851, Q851~853
Ai-NET BUS INTERFACE
BUS+
BUS-
S501
Ai-NET
NORM/(EQ/DIV)
JK503
Ai-NET Connector
BATT
ACC
M1501
MAIN MOTOR
○△□Q1501,1502
●Q3501,3502,3505
MAIN MOTOR DRIVER
PACK IN S1501
PAUSE S1502
MODE S1503
METAL S1504
○△□IC1501
●IC3501
SUB MOTOR DRIVER (FOR. REV./RACING /BRAKE)
SUB MOTOR M1502
PT1501,1502
FOR/REV RUN DET
ROTARY ENCODER VOLUME
VR402(S402)
IC401
LCD DRIVER
LCD DISPLAY
LCD401
KEY MATRIX
S401~417
IC402
REMOCON RECEIVER
Q091,092,094
FM/AM+B
FM+B
AM+B
Q093
FM/AM SWITCHING
Q881,882,885,886
POWER ANTENNA & OUT REMOTE SWITCHING
Q508
INTERRUPT IN SWITCHING
Q887,888(○●△)
LCD+B
Q871
REGULATOR +5V
+5V
Q504,506
AUDIO+B
AUDIO +B
●Q509,510
LAMP+B
LAMP +B
POWER AMP
ACC DETECTOR
Q872,873
ET802
Assy, ISO Connector
OPEN
SPEAKER (●NC)
POWER
P. ANT
ACC
BATT
○△□15A,●7.5A
OUT-REMO
Remote Turn-On
Audio Interrupt In(○●)

NOTE: ○: For TDA-7556R Model Only,
●: For TDA-7659R Model Only,
△: For TDA-7552R Model Only,
□: For TDA-7550R Model Only,
Others : Common.

Parts Layout on P.C. Boards and Wiring Diagram (1/4)


ET502
□ Assy., RCA Connector
Rear Out
L
R
Remote Turn On
SHLD
WHT (REAR-L)
SHLD
RED (REAR-R)
BLU/WHT (OUT-REMO)
1
4
To CB502
△ Assy., RCA Connector
Rear Out
L
R
Remote Turn-On
F-Out / NFP
R
L
SHLD
WHT (REAR-L)
SHLD
RED (REAR-R)
BLU/WHT (OUT-REMO)
RED (FRONT-R)
SHLD
WHT (FRONT-L)
SHLD
1
7
To CB502
○● Assy., RCA Connector
Rear Out
L
R
Remote Turn-On
Front Out
R
L
Audio Interrupt In
Subwoofer Out
R
L
SHLD
WHT (REAR-L)
SHLD
RED (REAR-R)
BLU/WHT (OUT-REMO)
SHLD
RED (FRONT-R)
SHLD
WHT (FRONT-L)
PNK/BLK (IN INT)
RED (NFP-R)
SHLD
WHT (NFP-L)
SHLD
1
4
5
11
To CB502

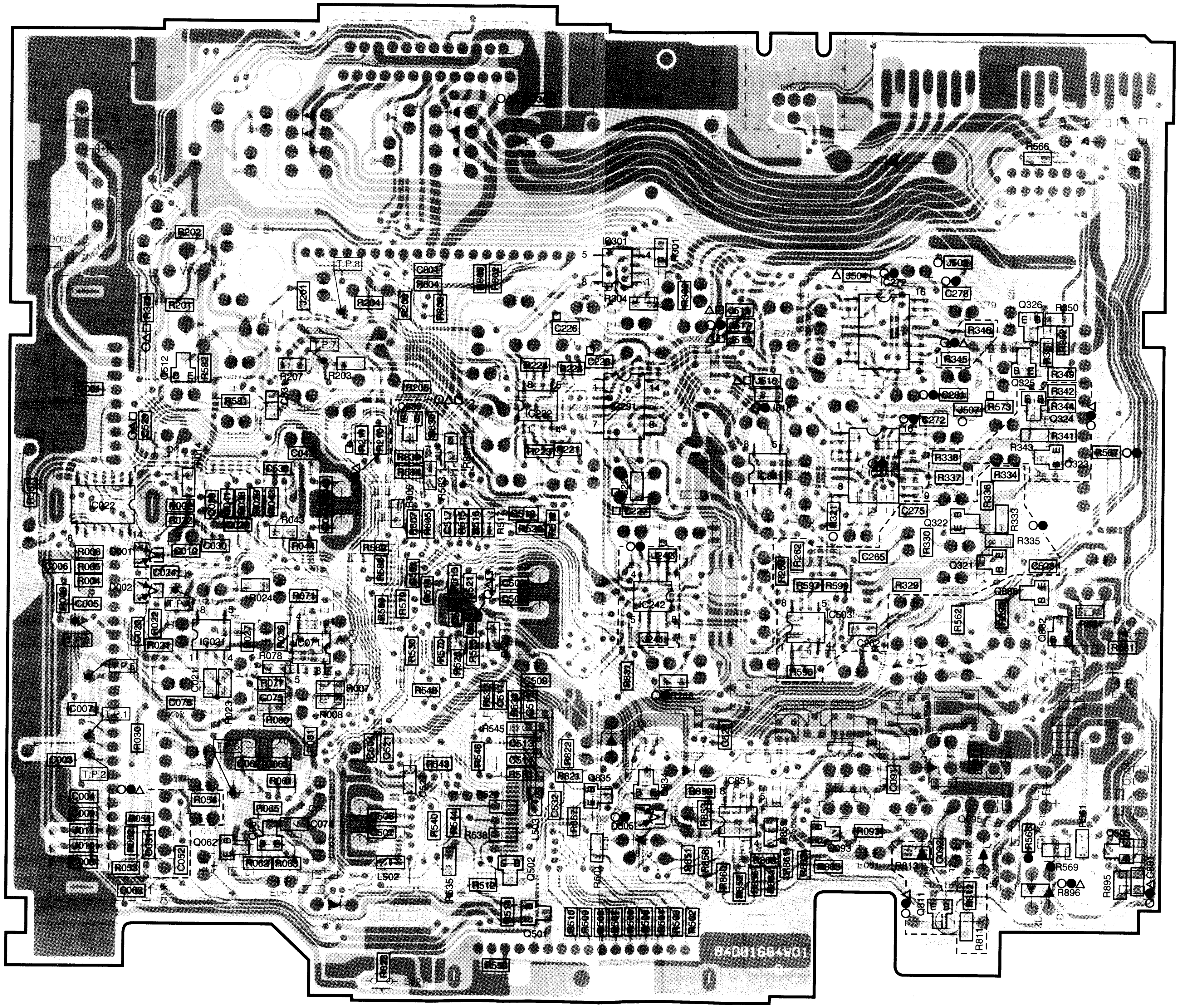

From GR Control P.C.Board (○△□CB1101, ●CB3101)
20
1
To CB801
Main P.C.Board (Component Side View)
ET504
JK503
IC361
ET001
D502
D503
S501
CB801
DSP001
BPF001
D003
FE001
VR202
VR201
IC201
IC221
IC322
IC261
IC241
IC501
IC041
IC832
IC821
BZ801
CB501
S801
D501
8-D8169-401
To CB501
1
16
From Front P.C.Board (CH401)

NOTE : ○ : For TDA-7556R Model Only
● : For TDA-7659R Model Only
△ : For TDA-7552R Model Only
□ : For TDA-7550R Model Only
Others : Common

Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.C. Boards and Wiring Diagram (2/4)

Main P.C.Board (Foil Side View)


1
2
3
4
5
A
B
C
D
E
F
G
IC301
IC022
IC024
IC242
IC291
IC272
IC503
IC851
Q326
Q324
Q323
Q322
Q321
Q501
Q502
Q062
T.P.1
T.P.2
T.P.7
T.P.8
84D81684W01

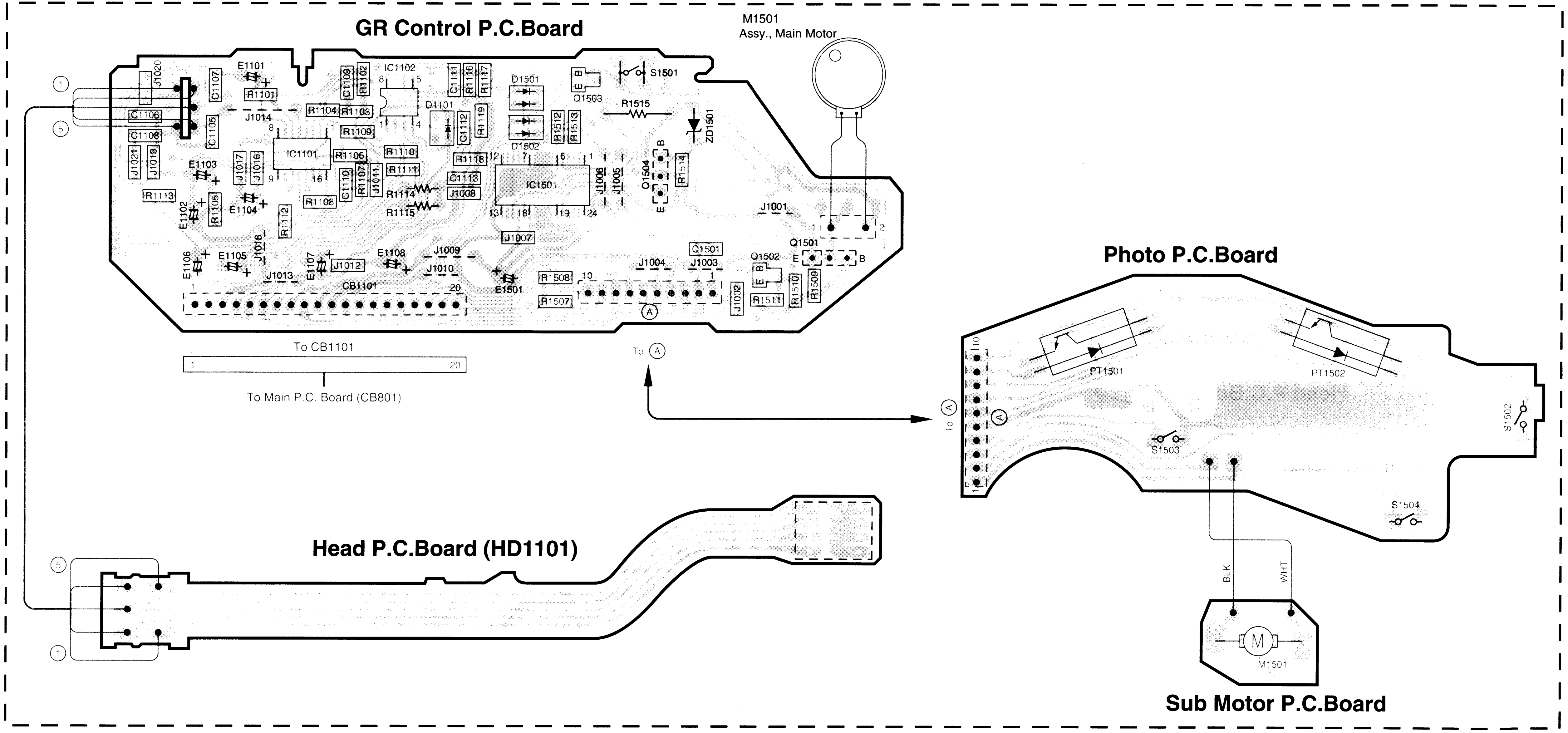
NOTE : ○ : For TDA-7556R Model Only
● : For TDA-7659R Model Only
△ : For TDA-7552R Model Only
□ : For TDA-7550R Model Only
Others : Common

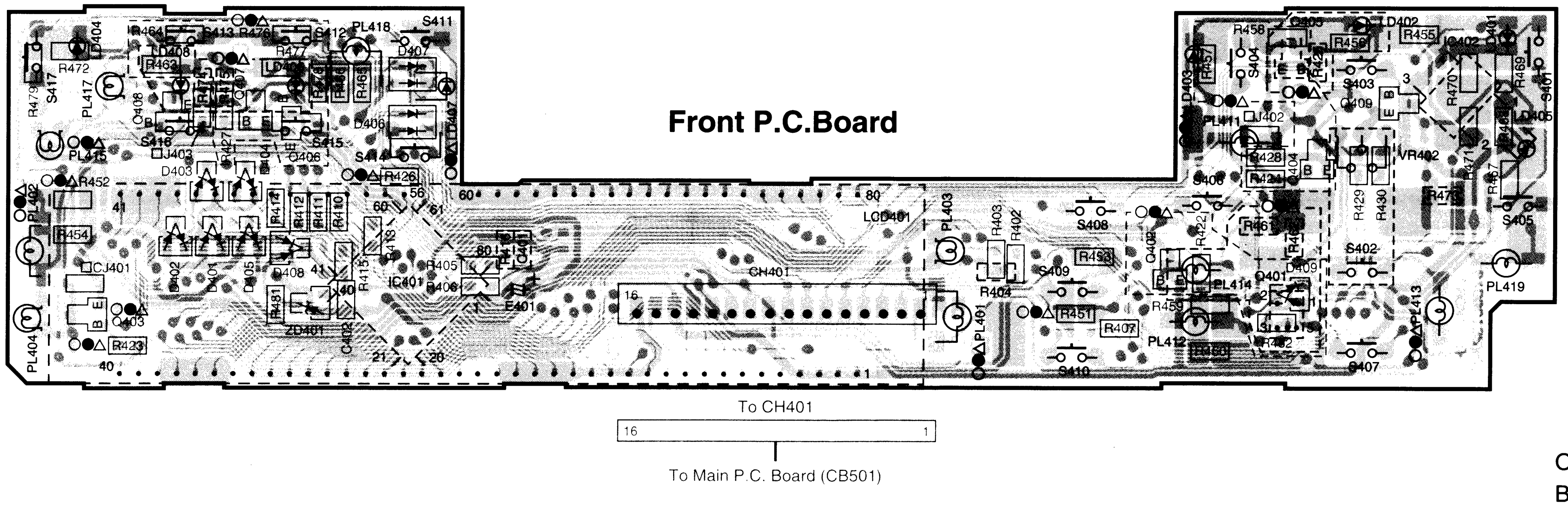
Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.C. Boards and Wiring Diagram (3/4)

All P.C. Boards viewed from soldered side.

○△□(TDA-7556R/TDA-7552R/TDA-7550R Model Only)


GR Control P.C.Board
M1501
Assy., Main Motor
IC1101
IC1102
IC1501
D1501
D1502
ZD1501
Q1501
Q1502
Q1503
Q1504
S1501
CB1101
To CB1101
To Main P.C. Board (CB801)
To Ⓐ
Photo P.C.Board
PT1501
PT1502
S1502
S1503
S1504
Head P.C.Board (HD1101)
BLK
WHT
M1501
Sub Motor P.C.Board


Front P.C.Board
LCD401
CH401
IC401
To CH401
To Main P.C. Board (CB501)

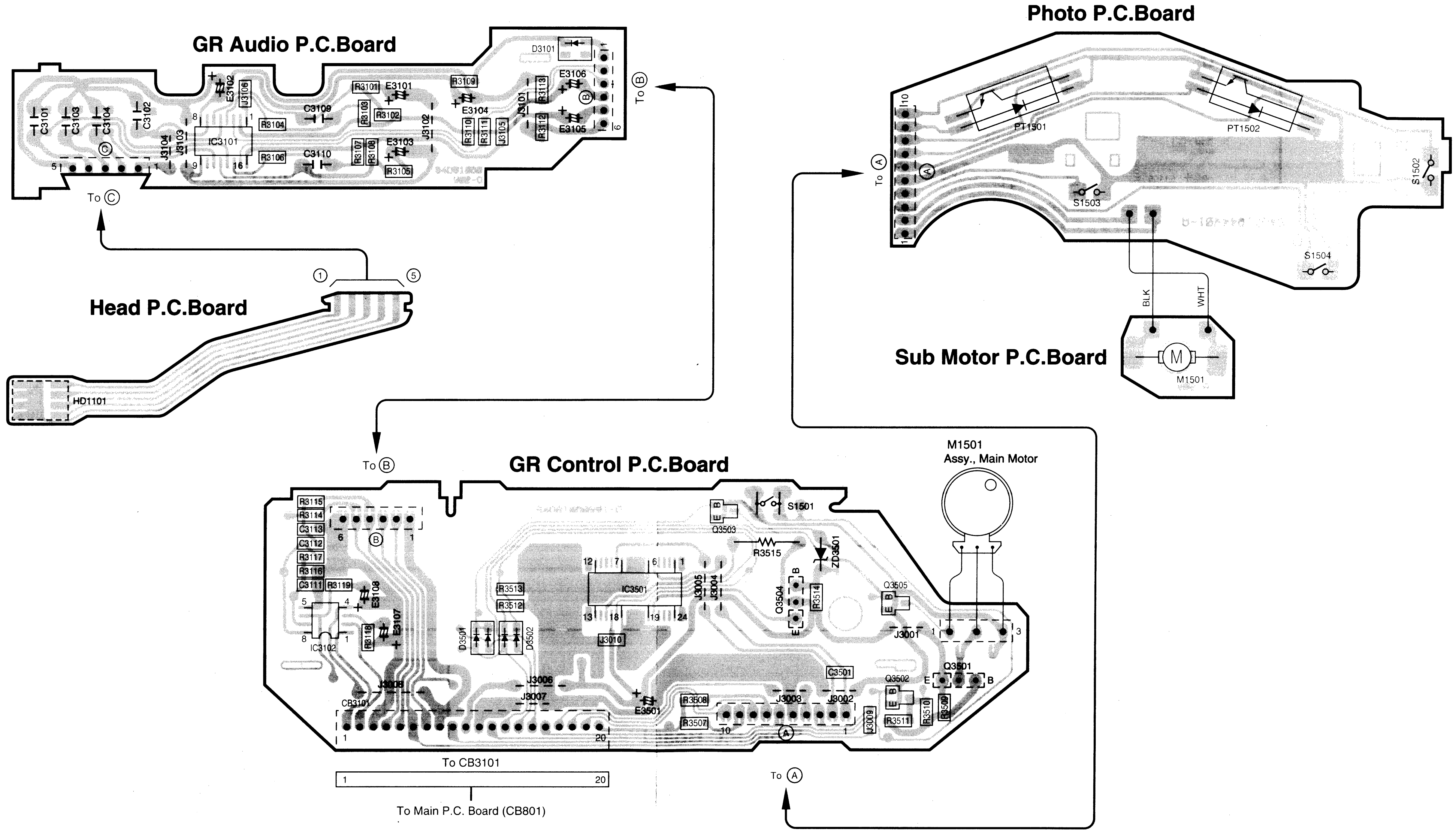
NOTE : ○ : For TDA-7556R Model Only
● : For TDA-7659R Model Only
△ : For TDA-7552R Model Only
□ : For TDA-7550R Model Only
Others : Common

Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Parts Layout on P.C. Boards and Wiring Diagram (4/4)

All P.C. Boards viewed from soldered side.

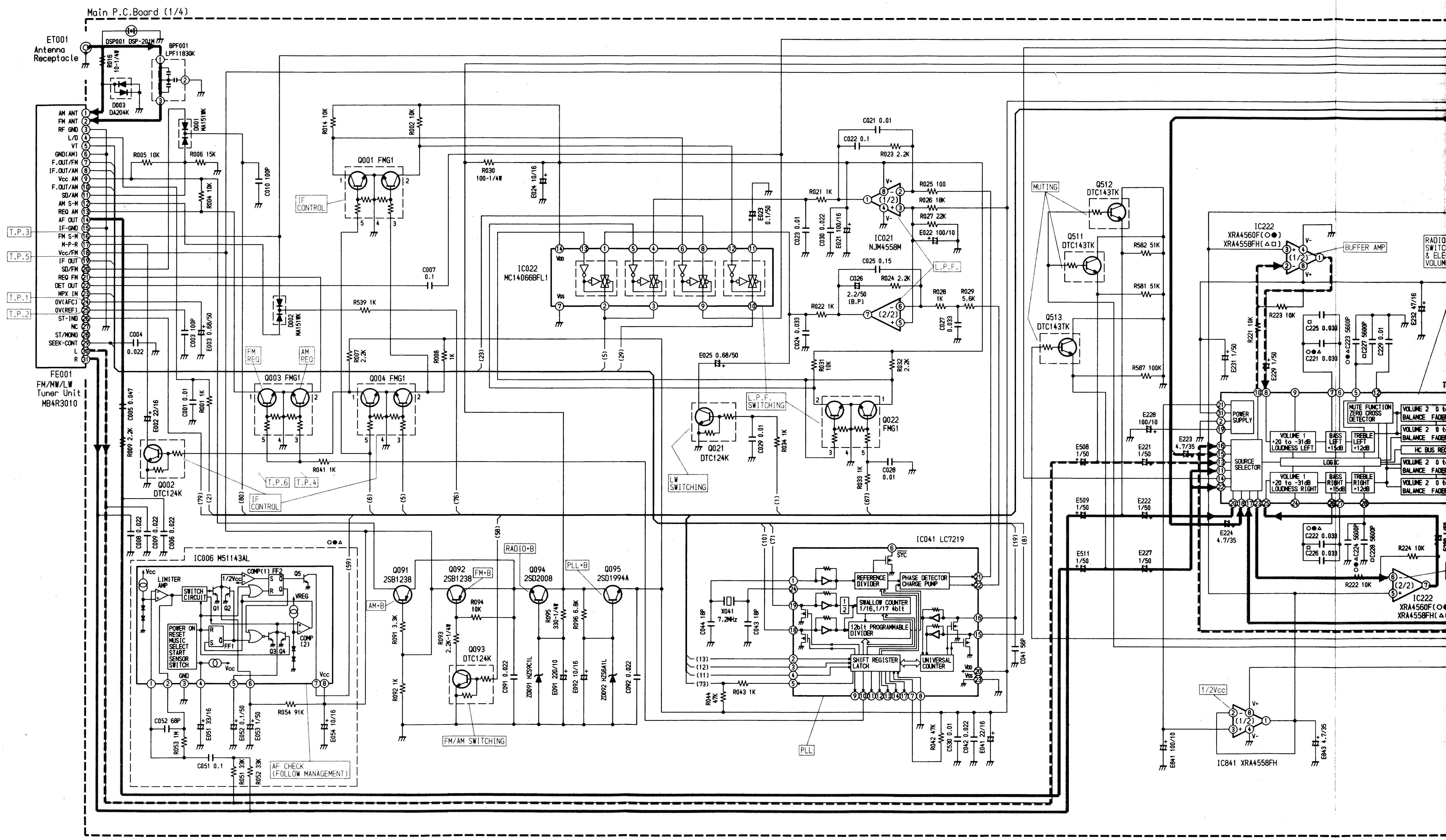
● (TDA-7659R Model Only)


GR Audio P.C.Board
C3101
C3103
C3104
C3102
E3102
J3106
IC3101
J3104
J3103
R3104
R3106
C3109
C3110
R3101
E3101
R3103
R3102
R3107
R3108
E3103
R3105
R3109
E3104
J3102
R3110
R3111
J3105
J3101
R3113
R3112
E3106
E3105
D3101
To Ⓒ
To Ⓑ
Ⓑ
Ⓒ
Head P.C.Board
①
⑤
HD1101
Photo P.C.Board
PT1501
PT1502
S1502
S1503
S1504
To Ⓐ
Ⓐ
BLK
WHT
Sub Motor P.C.Board
M1501
GR Control P.C.Board
To Ⓑ
R3115
R3114
C3113
C3112
R3117
R3116
C3111
R3119
E3108
E3107
R3118
IC3102
CB3101
J3008
D3501
D3502
R3513
R3512
J3006
J3007
IC3501
J3010
J3005
J3004
E3501
R3506
R3507
Q3503
S1501
R3515
ZD3501
Q3504
R3514
Q3505
J3001
Q3501
Q3502
C3501
J3003
J3002
J3009
R3511
R3510
R3509
M1501
Assy., Main Motor
To CB3101
To Main P.C. Board (CB801)
To Ⓐ

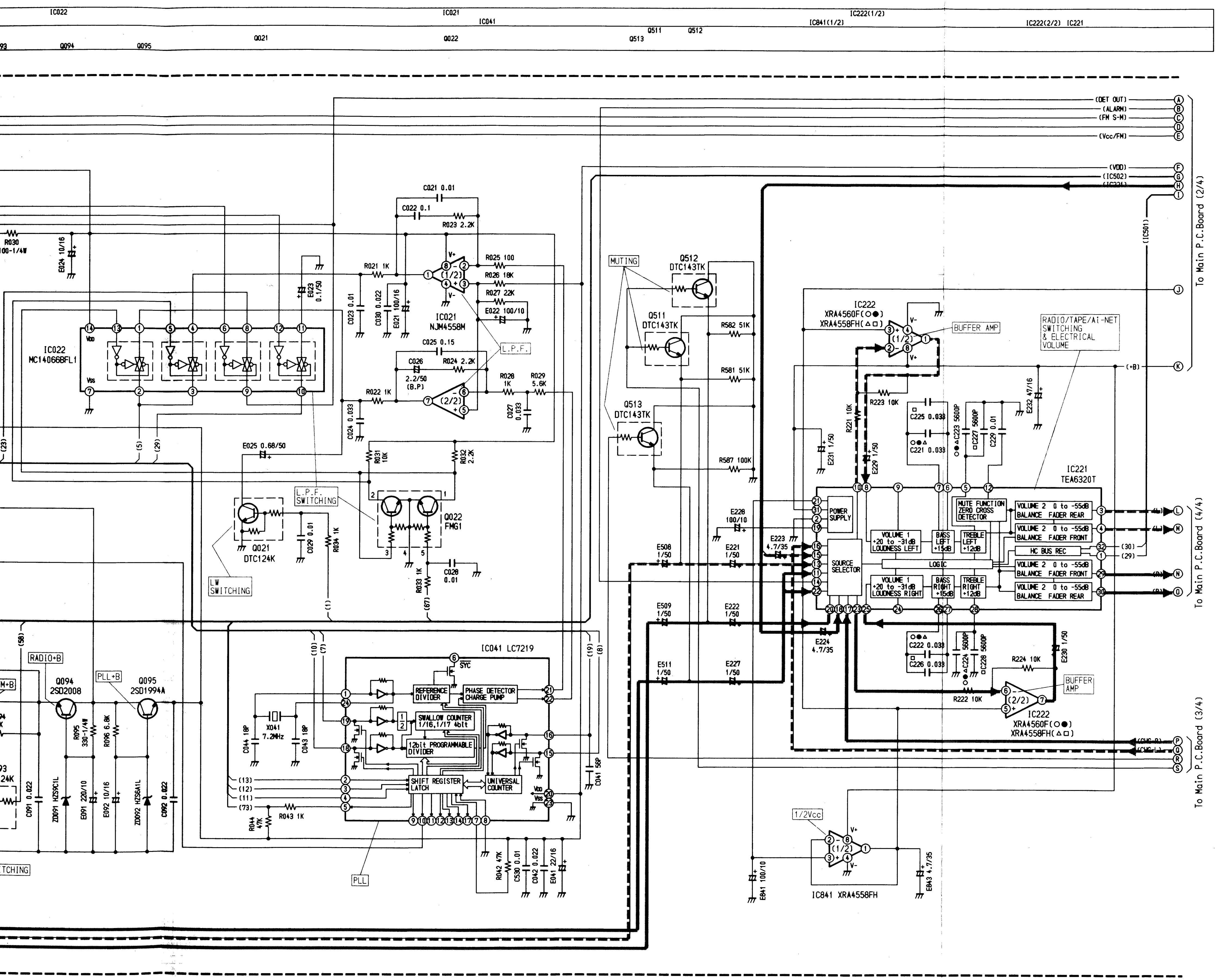
Blue Color Pattern : Foil Side Pattern

Schematic Diagram (1/6)

IC	IC006 IC022 IC021 IC041 IC841(1/2) IC222(1/2) IC222(2/2)
Transistor (Q)	Q002 Q003 Q001 Q004 Q091 Q092 Q093 Q094 Q095 Q021 Q022 Q511 Q513 Q512



Main P.C.Board (1/4)
ET001 Antenna Receptacle
DSP001 DSP-201M
BPF001 LPF11830K
R016 10-1/4W
D003 DA204K
D001 MA151WK
R005 10K
R006 15K
R004 10K
C010 100P
AM ANT
FM ANT
RF GND
L/D
VT
GND(AM)
F.OUT/FM
IF.OUT/AM
Vcc AM
F.OUT/AM
SD/AM
AM S-M
REQ AM
AF OUT
IF-GND
FM S-M
M-P-R
Vcc/FM
IF OUT
SD/FM
REQ FM
DET OUT
MPX IN
OV(AFC)
OV(REF)
ST-IND
NC
ST/MONO
SEEK-CONT
L
R
T.P.3
T.P.5
T.P.1
T.P.2
FE001 FM/MW/LW Tuner Unit MB4R3010
R014 10K
R002 10K
Q001 FMG1
IF CONTROL
R030 100-1/4W
E024 10/16
C007 0.1
R539 1K
D002 MA151WK
FM REQ
AM REQ
Q003 FMG1
Q004 FMG1
R007 2.2K
R008 1K
C004 0.022
C003 100P
E003 0.68/50
C005 0.047
E002 22/16
C001 0.01
R001 1K
R009 2.2K
Q002 DTC124K
R041 1K
T.P.6
T.P.4
IF CONTROL
C008 0.022
C009 0.022
C006 0.022
IC006 M51143AL
LIMITER AMP
SWITCH CIRCUIT
1/2Vcc
COMP(1)
FF2
VREG
POWER ON RESET MUSIC SELECT START SENSOR SWITCH
FF1
COMP (2)
GND
Vcc
C052 68P
R053 1M
E051 33/16
E052 0.1/50
E053 1/50
R054 91K
E054 10/16
C051 0.1
R051 33K
R052 33K
AF CHECK (FOLLOW MANAGEMENT)
IC022 MC14066BFL1
E023 0.1/50
RADIO+B
AM+B
Q091 2SB1238
R091 3.3K
R092 1K
Q092 2SB1238
FM+B
R094 10K
R093 2.2K-1/4W
Q093 DTC124K
FM/AM SWITCHING
C091 0.022
ZD091 HZS9C1L
Q094 2SD2008
R095 330-1/4W
E091 220/10
R096 6.8K
E092 10/16
PLL+B
Q095 2SD1994A
ZD092 HZS6A1L
C092 0.022
C021 0.01
C022 0.1
R023 2.2K
R021 1K
R025 100
R026 18K
R027 22K
E022 100/10
C023 0.01
C030 0.022
E021 100/16
IC021 NJM4558M
C025 0.15
C026 2.2/50 (B.P)
R024 2.2K
R022 1K
R028 1K
R029 5.6K
C027 0.033
C024 0.033
L.P.F.
E025 0.68/50
R031 10K
R032 2.2K
L.P.F. SWITCHING
Q021 DTC124K
C029 0.01
R034 1K
LW SWITCHING
Q022 FMG1
R033 1K
C028 0.01
IC041 LC7219
SYC
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16,1/17 4bit
12bit PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
C044 18P
X041 7.2MHz
C043 18P
R044 47K
R043 1K
PLL
R042 47K
C530 0.01
C042 0.022
E041 22/16
C041 56P
MUTING
Q512 DTC143TK
Q511 DTC143TK
R582 51K
R581 51K
Q513 DTC143TK
R587 100K
E228 100/10
E508 1/50
E221 1/50
E223 4.7/35
E509 1/50
E222 1/50
E511 1/50
E227 1/50
IC222 XRA4560F(○●) XRA4558FH(△□)
BUFFER AMP
R223 10K
E231 1/50
R221 10K
E229 1/50
C225 0.033
C221 0.033
C223 5600P
C227 5600P
C229 0.01
E232 47/16
POWER SUPPLY
SOURCE SELECTOR
VOLUME 1 +20 to -31dB LOUDNESS LEFT
BASS LEFT +15dB
TREBLE LEFT +12dB
MUTE FUNCTION ZERO CROSS DETECTOR
VOLUME 2 0 to BALANCE FADER
LOGIC
HC BUS REC
VOLUME 1 +20 to -31dB LOUDNESS RIGHT
BASS RIGHT +15dB
TREBLE RIGHT +12dB
E224 4.7/35
C222 0.033
C226 0.033
C224 5600P
C228 5600P
R224 10K
R222 10K
IC222 XRA4560F(○● XRA4558FH(△
1/2Vcc
E841 100/10
IC841 XRA4558FH
E843 4.7/35
RADIO SWITC & ELE VOLUM


IC022
IC021
IC041
IC841(1/2)
IC222(1/2)
IC222(2/2) IC221
Q094
Q095
Q021
Q022
Q511
Q512
Q513
IC022 MC14066BFL1
IC021 NJM4558M
IC041 LC7219
IC222 XRA4560F(○●) XRA4558FH(△□)
IC221 TEA6320T
IC841 XRA4558FH
Q512 DTC143TK
Q511 DTC143TK
Q513 DTC143TK
Q021 DTC124K
Q022 FMG1
Q094 2SD2008
Q095 2SD1994A
MUTING
BUFFER AMP
RADIO/TAPE/AI-NET SWITCHING & ELECTRICAL VOLUME
L.P.F.
L.P.F. SWITCHING
LW SWITCHING
RADIO+B
PLL+B
PLL
1/2Vcc
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
SWALLOW COUNTER 1/16,1/17 4bit
12bit PROGRAMMABLE DIVIDER
SHIFT REGISTER LATCH
UNIVERSAL COUNTER
POWER SUPPLY
SOURCE SELECTOR
LOGIC
MUTE FUNCTION ZERO CROSS DETECTOR
VOLUME 1 +20 to -31dB LOUDNESS LEFT
VOLUME 1 +20 to -31dB LOUDNESS RIGHT
BASS LEFT ±15dB
BASS RIGHT ±15dB
TREBLE LEFT ±12dB
TREBLE RIGHT ±12dB
VOLUME 2 0 to -55dB BALANCE FADER REAR
VOLUME 2 0 to -55dB BALANCE FADER FRONT
HC BUS REC
X041 7.2MHz
(DET OUT)
(ALARM)
(FM S-M)
(Vcc/FM)
(VDD)
(IC502)
(IC501)
(+B)
To Main P.C.Board (2/4)
To Main P.C.Board (4/4)
To Main P.C.Board (3/4)

○●△IC006

1	1.4V	FM
2	1.4V	FM
3	0V	
4	1.3V	FM
5	0V	FM
6	0V/8.9V	MOD. ON/OFF
7	0V/5V	MOD. ON/OFF
8	9V	

IC021

1	4.2V	FM
2	4.2V	FM
3	4.2V	FM
4	0V	
5	2.7V	FM
6	2.7V	FM
7	2.2V/4.2V	RDSON/OFF
8	9.2V	

IC022

1	2.2V/4.2V	RDSON/OFF
2	4.2V	
3	4.2V	
4	2.2V/5.1V	RDSON/OFF
5	9.2V/0V	RDSON/OFF
6	9.2V	FM
7	0V	
8	2.4V	FM
9	2.4V	FM
10	0V/2.3V	SEEK ON/OFF
11	0V	FM
12	9.2V	FM
13	0V/8.6V	FM/AM
14	9.2V	

IC222

1~3	4.2V	FM
4	0V	
5~7	4.2V	FM
8	8.5V	

IC841

1~3	4.3V	
4	0V	
5~7	4.3V	TAPE
8	8.5V	

IC041

1	OSC		16	0V	FM
2~5	4.9V	SEEK ON	17	NC	
6	NC		18	2.5V	AM
7	4.8V	FM	19	2.6V	FM
8	0V		20	4.9V	
9	NC		21, 22	2.7V	FM
10	4.8V	FM	23	0V	
11~14	NC		24	OSC	
15	2.8V	AM			

Q004

1	0V/4V	IF MUTE ON/OFF
2	3V/0V	SEEK ON/OFF
3	0V/5V	SEEK ON/OFF
4	0V/0V	
5	4.5V/0V	IF MUTE ON/OFF

IC221

1	4.9V		17	Audio	CD Changer
2	0V		18	Audio	TAPE
3, 4	Audio		19, 20	Audio	FM
5~8	4.2V	FM	21	4.2V	FM
9	NC		22	Audio	AM
10	4.2V	FM	23	4.2V	FM
11	Audio	AM	24	NC	
12	—		25~28	4.2V	FM
13	Audio	FM	29, 30	Audio	
14	Audio	TP-ALM	31	8.5V	
15	Audio	TAPE	32	4.9V	
16	Audio	CD Changer			

	E	C	B	MODE
Q002	0V/0V	0V/0V	0V/4V	IF MUTE ON/OFF
Q021	0V/0V	0V/0V	4.7V/0V	LW ON/OFF
Q091	9.1V/9.1V	0V/9V	9V/8.5V	FM/AM
Q092	9V/9.1V	9V/0.7V	8.4V/9.1V	FM/AM
Q093	0V/0V	0V/9V	4.8V/0V	FM/AM
Q094	9.1V	13.6V	9.6V	TUNER
Q095	4.9V	13.6V	5.5V	TUNER
Q511	0V/0V	0V/0V	5V/0V	IF MUTE ON/OFF
Q512	0V/0V	0V/0V	5V/0V	IF MUTE ON/OFF
Q513	0V/0V	0V/0V	5V/0V	IF MUTE ON/OFF

	1	2	3	4	5	MODE
Q001	0V/9V	0V/9V	3V/0V	0V/0V	3V/0V	SEEK ON/OFF
Q003	8V/0V	1V/0V	0V/4.5V	0V/0V	0V/4.5V	REQ ON/OFF
Q022	0V/9V	9V/0V	0V/9V	0V/0V	4.9V/0V	RDS ON/OFF

<Measuring Conditions>

1. Power Supply Voltage : DC14V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

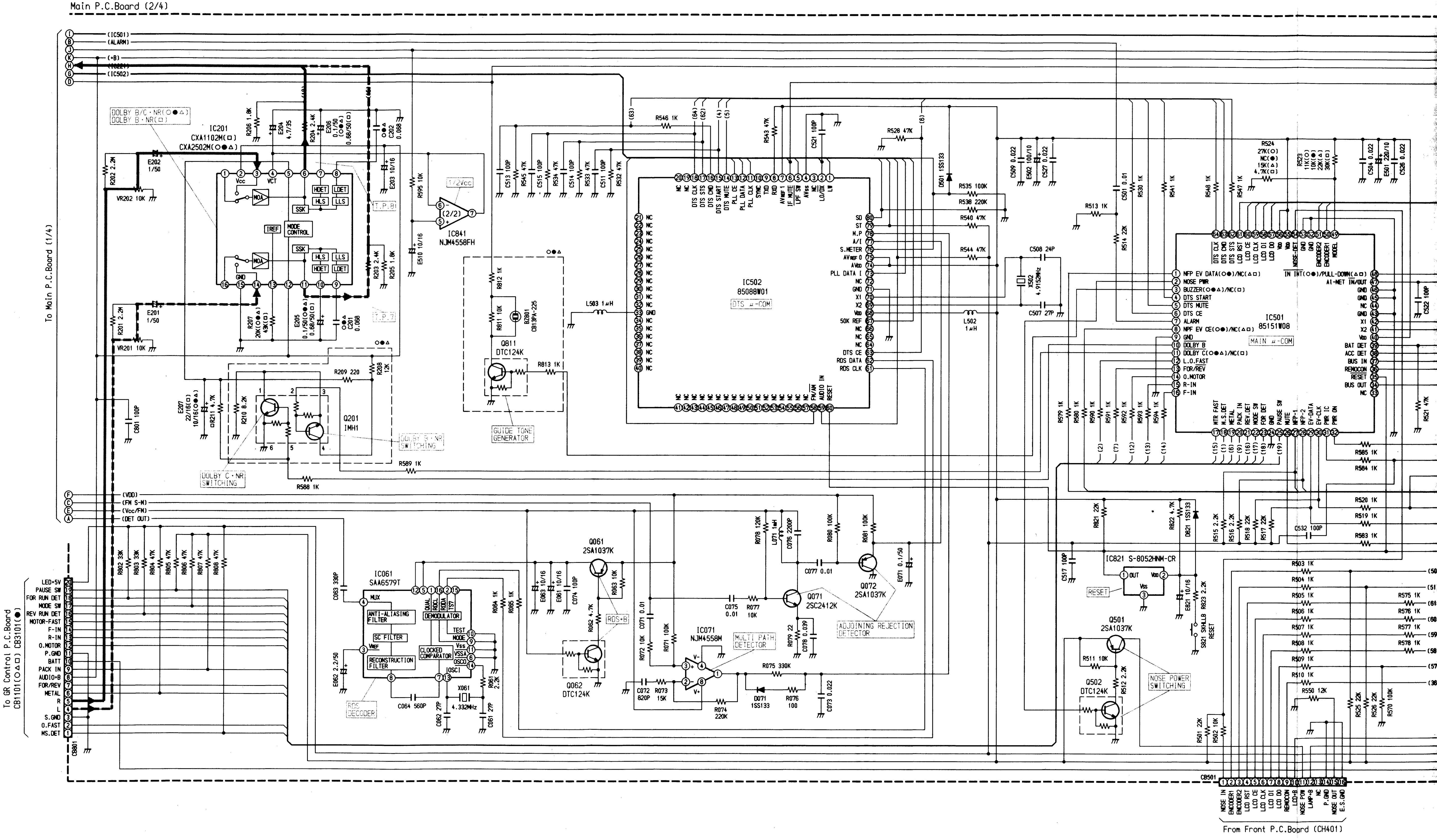
NOTE: ○: For TDA-7556R Model Only,
●: For TDA-7659R Model Only,
△: For TDA-7552R Model Only,
□: For TDA-7550R Model Only,
Others : Common.

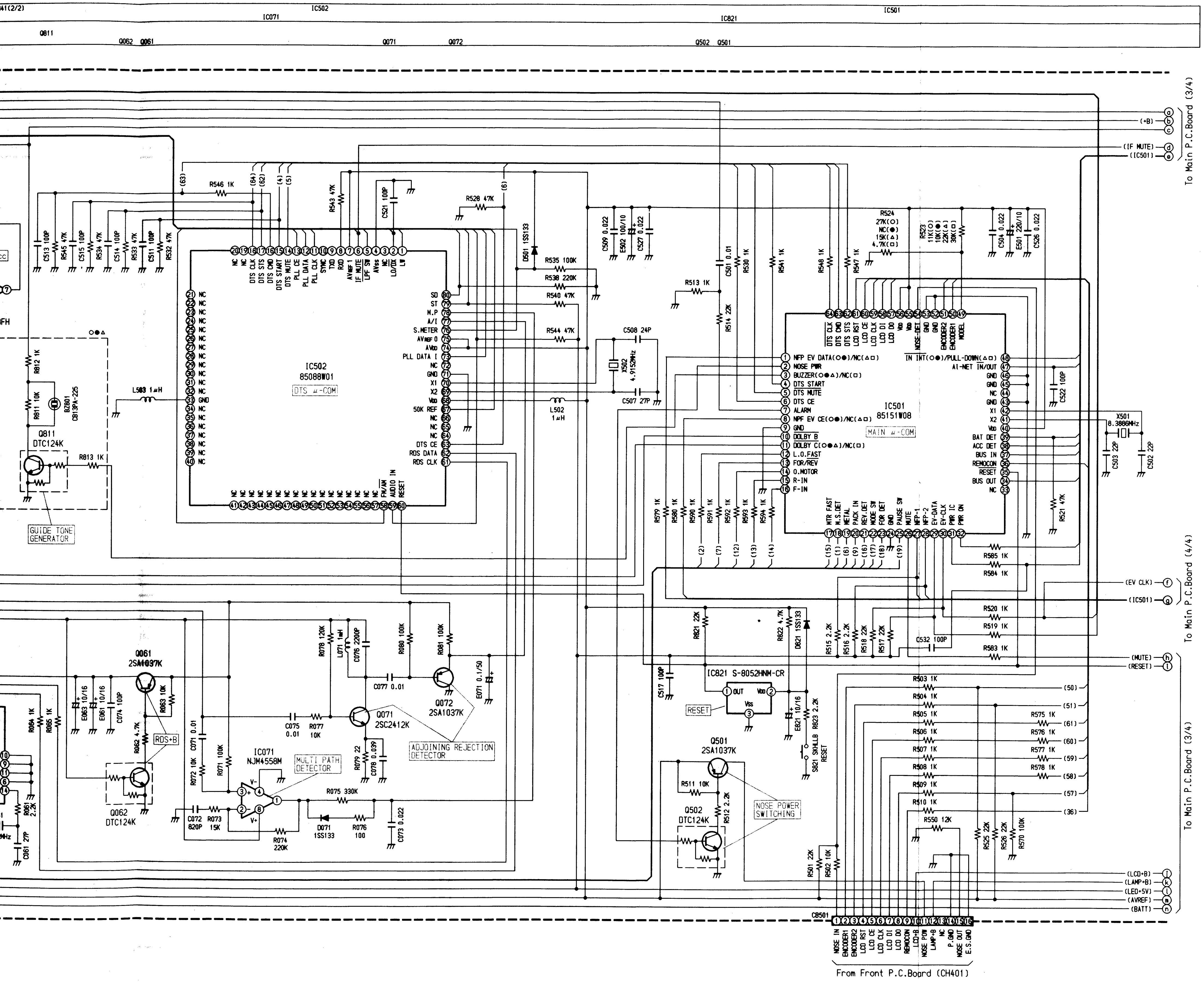
NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (2/6)

IC	IC201 IC061 IC841(2/2) IC071 IC502 IC821 IC501
Transistor (Q)	Q201 Q811 Q062 Q061 Q071 Q072 Q502 Q501


Main P.C.Board (2/4)
To Main P.C.Board (1/4)
(IC501)
(ALARM)
(+B)
(IC502)
DOLBY B/C·NR(○●△)
DOLBY B·NR(□)
IC201
CXA1102M(□)
CXA2502M(○●△)
VR202 10K
VR201 10K
MOA
SSK
IREF
MODE CONTROL
HDET
LDET
HLS
LLS
T.P.B
T.P.A
Q201
IMH1
DOLBY S·NR SWITCHING
DOLBY C·NR SWITCHING
IC841
NJM4558FH
1/2Vcc
Q811
DTC124K
BZ801
CB13PA-225
GUIDE TONE GENERATOR
L503 1μH
IC502
85088W01
DTS μ-COM
X502 4.9152MHz
L502 1μH
IC501
85151W08
MAIN μ-COM
(VDD)
(FM S-M)
(Vcc/FM)
(DET OUT)
To GR Control P.C.Board
CB1101(○△□) CB3101(●)
LED+5V
PAUSE SW
FOR RUN DET
MODE SW
REV RUN DET
MOTOR-FAST
F-IN
R-IN
O.MOTOR
P.GND
BATT
PACK IN
AUDIO-B
FOR/REV
METAL
R
L
S.GND
O.FAST
MS.DET
CB801
IC061
SAA6579T
MUX
ANTI-ALIASING FILTER
SC FILTER
RECONSTRUCTION FILTER
DEMODULATOR
CLOCKED COMPARATOR
X061 4.332MHz
RDS DECODER
Q061
2SA1037K
Q062
DTC124K
RDS·B
IC071
NJM4558M
MULTI PATH DETECTOR
Q071
2SC2412K
Q072
2SA1037K
ADJOINING REJECTION DETECTOR
IC821 S-8052HNM-CR
RESET
S821 SKHLLB
Q501
2SA1037K
Q502
DTC124K
NOSE POWER SWITCHING
CB501
From Front P.C.Board (CH401)
1
2
3
4
5
A
B
C
D
E
F
G
H


IC502
85088W01
DTS μ-COM
IC501
85151W08
MAIN μ-COM
IC071
NJM4558M
MULTI PATH DETECTOR
ADJOINING REJECTION DETECTOR
IC821 S-8052HNM-CR
RESET
NOSE POWER SWITCHING
GUIDE TONE GENERATOR
RDS+B
Q061 2SA1037K
Q062 DTC124K
Q071 2SC2412K
Q072 2SA1037K
Q501 2SA1037K
Q502 DTC124K
Q811 DTC124K
BZ801 CB13PA-225
X501 8.3886MHz
X502 4.9152MHz
To Main P.C.Board (3/4)
To Main P.C.Board (4/4)
To Main P.C.Board (3/4)
(+B)
(IF MUTE)
(IC501)
(EV CLK)
(IC501)
(MUTE)
(RESET)
(LCD+B)
(LAMP+B)
(LED+5V)
(AVREF)
(BATT)
CB501
From Front P.C.Board (CH401)

IC061

1	NC	
2	5V	FM
3, 4	2.4V	FM
5	4.8V	
6	0V	
7, 8	2.4V	FM
9~11	0V	
12	4.9V	
13, 14	OSC	
15	NC	
16	4.8V	FM

IC071

1~3	4.8V	FM
4	0V	
5~7	NC	
8	9V	

IC821

1	5V/1.7V	RESET ON/OFF
2	5V/0V	RESET ON/OFF
3	0V	

IC841

1~3	4.3V	
4	0V	
5~7	4.3V	TAPE
8	8.5V	

IC502

1	5V	LW	60	0V/5V	RESET ON/OFF
2	5V/0V	LO/DX	61~63	DATA	
3	0V	FM	64~66	NC	
4	0V		67	5V/0V	RDS ON/OFF
5	5V	FM	68	5V	
6	0V	FM	69, 70	OSC	
7~9	5V	FM	71	0V	
10	0V	FM	72	NC	
11~18	DATA		73	DATA	
19~32	NC		74, 75	5V	
33	0V		76	0V	FM
34~57	NC		77, 78	5V	FM
58	5V/0V	FM/AM	79	0V/5V	ST/MONO
59	5V		80	0V	FM

IC201

1	NC	
2	8.5V	
3	4.2V	
4	4.2V	AVREF
○●△5	0V/3.5V/7.6V	NORMAL/DOLBY B/C
□5	0V/3.5V	NORMAL/DOLBY B
6	4.2V	
7	0V	
○●△8	0V	
□8	NC	
○●△9	0V	
□9	NC	
10	0V	
11	4.2V	
12	8.5V	
13	1.2V	
14	4.2V	
15	0V	
16	NC	

IC501

○●1	5V		27~30	5V	
△□1	NC		31	5V/0V	PWR IC ON/OFF
2	5V/0V	DF ON/OUT	32	5V/0V	Power ON/OFF
○●△3	0V	BUZZER	33	NC	
□3	NC		34	DATA	
4	PS		35	0V/5V	RESET ON/OFF
5, 6	5V		36	DATA	
7	0V	ALARM	37	DATA	
○●8	0V		38	5V/0V	ACC ON/OFF
△□8	NC		39	5V/0V	BATT ON/OFF
9	0V		40	5V	
10	0V/5V	DOLBY B ON/OFF	41, 42	OSC	
○●△11	0V/5V	DOLBY C ON/OFF	43	0V	
□11	NC		44	NC	
12	5V/0V	FF•REW/OTHER	45, 46	0V	
13	5V/0V	FOR/REV	47	0V/5V	CD Changer/EQ
14	5V/0V	TAPE • PLAY/OTHER	○●48	0V/5V	IN-INT ON/OFF
15, 16	0V		△□48	0V	
17	5V/0V	FF•REW/OTHER	49	—	
18	0V		50, 51	5V	
19	5V/0V	METAL/NORMAL	52, 53	0V	
20	5V/0V	PACK-IN/OUT	54	2.5V/5V	NOSE ON/OFF
21~23	DATA		55, 56	5V	
24	0V		57~59	DATA	
25	5V/0V	TAPE • PLAY/PAUSE	60, 61	5V	
26	0V		62~64	DATA	

	1	2	3	4	5	6	MODE
○●△Q201	0V/3.7V/0V	4.9V/4.9V/0V	0V/4.3V/8.2V	5V/0V/5V	0V/0V/0V	0V/0V/0V	NORMAL/DOLBY B/C

	E	C	B	MODE
Q061	4.9V	4.8V	4.2V	FM
Q062	0V	0V	9V	FM
Q071	0V	8.6V	0.9V	
Q072	4.8V	0V	4.8V	
Q501	5V/5V	5V/0V	4V/0V	NOSE P. ON/OFF
Q502	0V/0V	0V/4V	5V/0V	NOSE P. ON/OFF
○●△Q811	13.8V	0V	0V	

<Measuring Conditions>

1. Power Supply Voltage : DC14V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
FM : 98.1MHz
AM : 999kHz (MW)
TAPE: Blank Tape Play

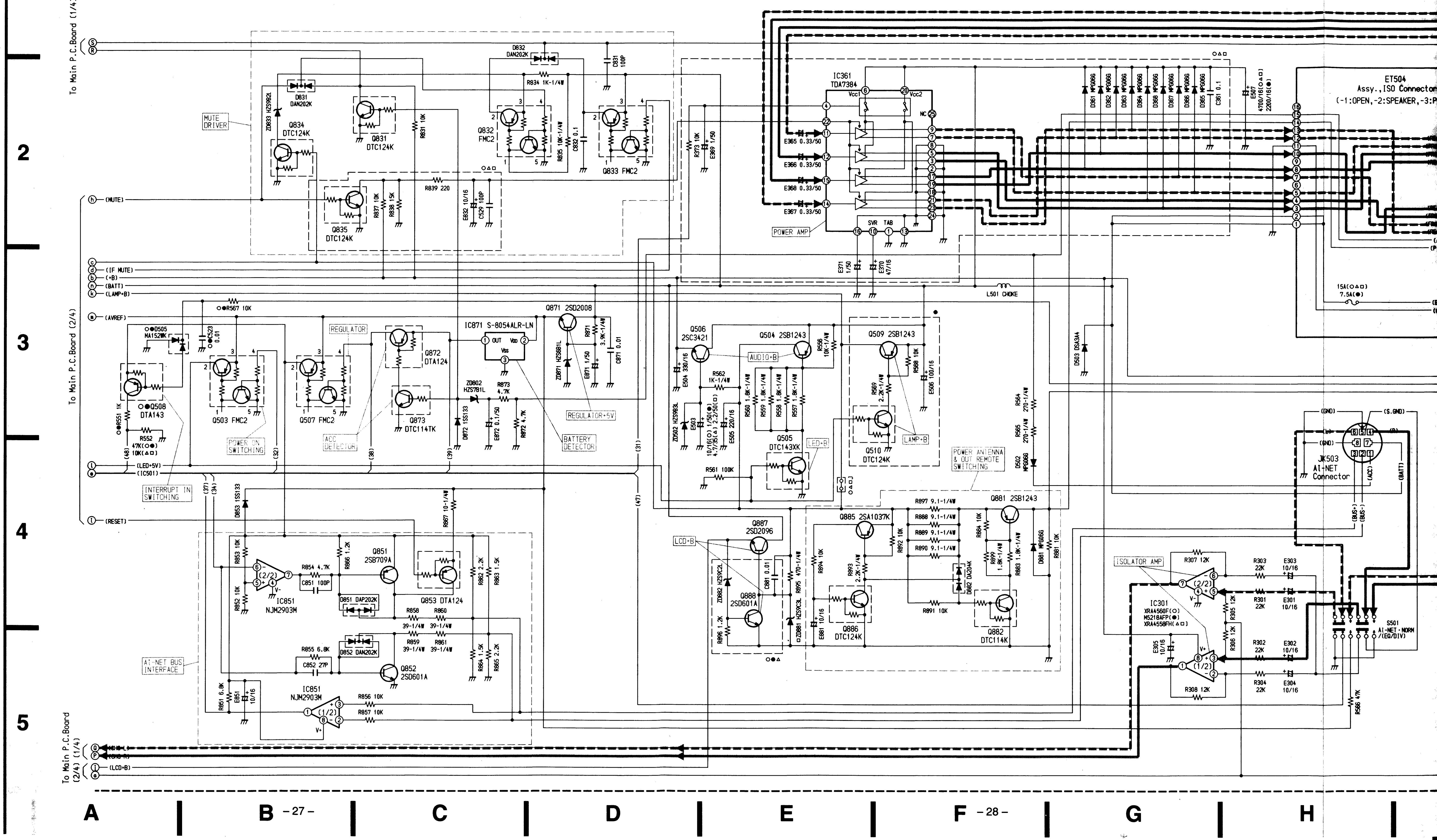
NOTE: ○ : For TDA-7556R Model Only,
● : For TDA-7659R Model Only,
△ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only,
Others : Common.

NOTE:

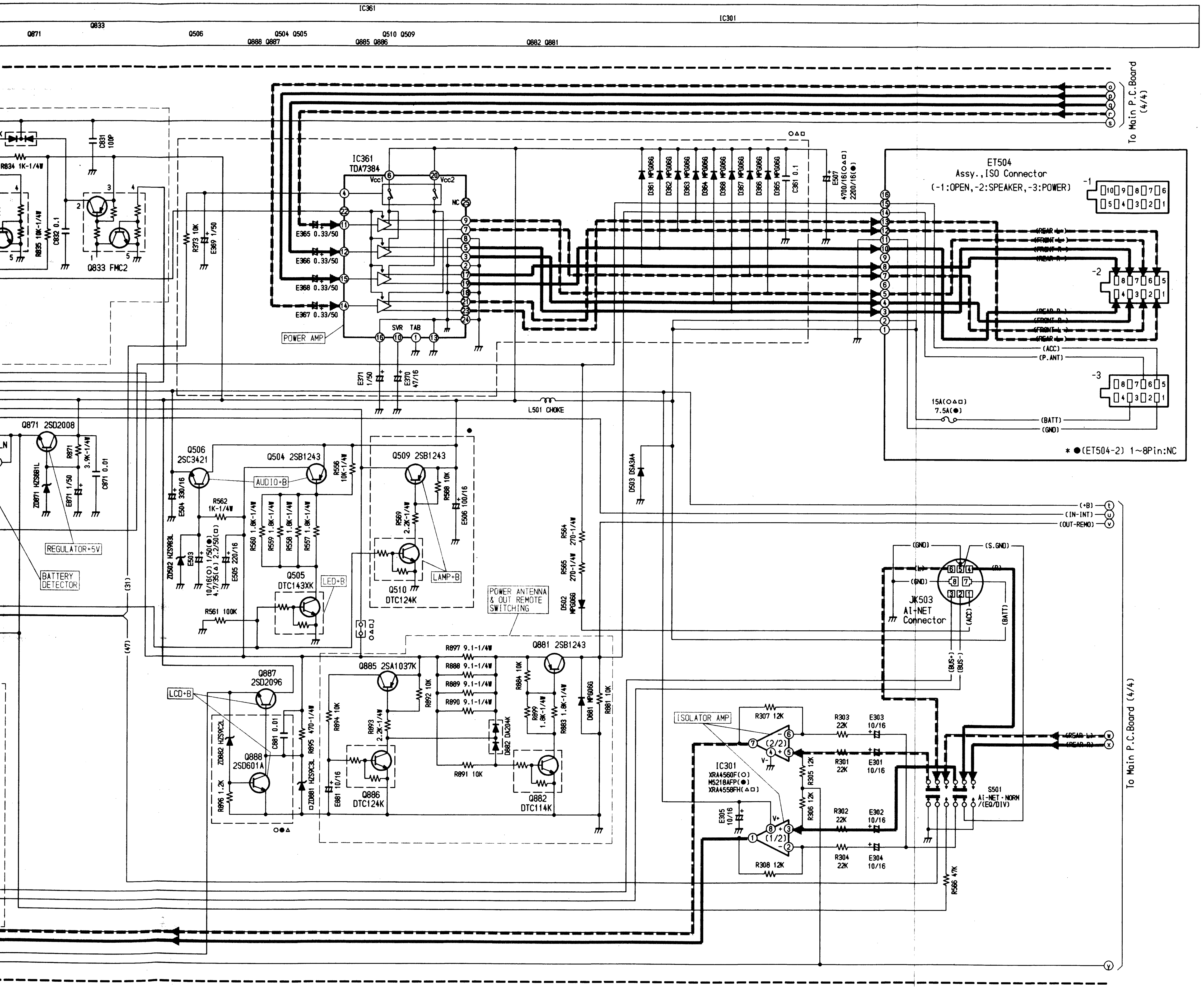
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (3/6)

IC	IC851	IC871	IC361	IC301
Transistor (Q)	Q508 Q503 Q834 Q507 Q835 Q831 Q851 Q852 Q872 Q873 Q853 Q832	Q871 Q833 Q506	Q888 Q887 Q504 Q505 Q885 Q886 Q510 Q509	Q882 Q881



Main P.C.Board (3/4)
To Main P.C.Board (1/4)
To Main P.C.Board (2/4)
To Main P.C.Board (1/4) (2/4)
(MUTE)
(IF MUTE)
(+B)
(BATT)
(LAMP+B)
(AVREF)
(LED+5V)
(IC501)
(RESET)
(LCD+B)
MUTE DRIVER
D831 DAN202K
ZD833 HZS9B2L
Q834 DTC124K
Q831 DTC124K
R831 10K
D832 DAN202K
R834 1K-1/4W
Q832 FMC2
R835 10K-1/4W
C832 0.1
C831 100P
Q833 FMC2
Q835 DTC124K
R837 10K
R838 15K
R839 220
E832 10/16
C529 100P
IC361 TDA7384
Vcc1
Vcc2
NC
E365 0.33/50
E366 0.33/50
E368 0.33/50
E367 0.33/50
SVR TAB
POWER AMP
R373 10K
E369 1/50
E371 1/50
E370 47/16
D361 MPG06G
D362 MPG06G
D363 MPG06G
D364 MPG06G
D367 MPG06G
D368 MPG06G
D366 MPG06G
D365 MPG06G
C361 0.1
E507 4700/16(○△□) 2200/16(●)
ET504
Assy.,ISO Connector
(-1:OPEN,-2:SPEAKER,-3:P
L501 CHOKE
15A(○△□) 7.5A(●)
R567 10K
D505 MA152WK
C523 0.01
Q508 DTA143
R551 1K
R552 47K(○●) 10K(△□)
Q503 FMC2
POWER ON SWITCHING
INTERRUPT IN SWITCHING
REGULATOR
Q507 FMC2
Q872 DTA124
Q873 DTC114TK
ACC DETECTOR
IC871 S-8054ALR-LN
OUT VDD Vss
ZD802 HZS7B1L
R873 4.7K
D872 1SS133
E872 0.1/50
R872 4.7K
BATTERY DETECTOR
Q871 2SD2008
ZD871 HZS6B1L
E871 1/50
R871 3.9K-1/4W
C871 0.01
REGULATOR+5V
Q506 2SC3421
E504 330/16
ZD502 HZS9B3L
E503 10/16(○) 1/50(●) 4.7/35(△) 2.2/50(□)
E505 220/16
R562 1K-1/4W
Q504 2SB1243
AUDIO+B
R556 10K-1/4W
R560 1.8K-1/4W
R559 1.8K-1/4W
R558 1.8K-1/4W
R557 1.8K-1/4W
Q505 DTC143XK
LED+B
R561 100K
Q509 2SB1243
R568 10K
E506 100/16
R569 2.2K-1/4W
Q510 DTC124K
LAMP+B
D503 DSA3A4
R564 270-1/4W
R565 270-1/4W
D502 MPG06G
POWER ANTENNA & OUT REMOTE SWITCHING
(GND)
(S.GND)
JK503 AI-NET Connector
(ACC)
(BATT)
(BUS+)
(BUS-)
D853 1SS133
R867 10-1/4W
R853 10K
R852 10K
IC851 NJM2903M (2/2)
R854 4.7K
C851 100P
R866 1.2K
Q851 2SB709A
Q853 DTA124
D851 DAP202K
R858 39-1/4W
R860 39-1/4W
R859 39-1/4W
R861 39-1/4W
R862 2.2K
R863 1.5K
R864 1.5K
R865 2.2K
D852 DAN202K
R855 6.8K
C852 27P
Q852 2SD601A
AI-NET BUS INTERFACE
R851 6.8K
E851 10/16
IC851 NJM2903M (1/2)
R856 10K
R857 10K
LCD+B
Q887 2SD2096
ZD882 HZS9C2L
C881 0.01
R895 470-1/4W
Q888 2SD601A
ZD881 HZS9C3L
R896 1.2K
Q885 2SA1037K
R897 9.1-1/4W
R888 9.1-1/4W
R889 9.1-1/4W
R890 9.1-1/4W
R892 10K
R894 10K
R893 2.2K-1/4W
Q886 DTC124K
E881 10/16
R884 10K
R899 1.8K-1/4W
R883 1.8K-1/4W
D882 DA204K
R891 10K
Q882 DTC114K
Q881 2SB1243
D881 MPG06G
R881 10K
ISOLATOR AMP
R307 12K
IC301 XRA4560F(○) M5218AFP(●) XRA4558FH(△□)
R303 22K
E303 10/16
R301 22K
E301 10/16
R305 12K
R306 12K
E305 10/16
R302 22K
E302 10/16
R304 22K
E304 10/16
R308 12K
S501 AI-NET·NORM /(EQ/DIV)
R566 47K
1
2
3
4
5
A
B
C
D
E
F
G
H


IC361
IC301
Q871
Q833
Q506
Q504 Q505
Q888 Q887
Q510 Q509
Q885 Q886
Q882 Q881
To Main P.C.Board (4/4)
IC361 TDA7384
Vcc1
Vcc2
NC
E365 0.33/50
E366 0.33/50
E368 0.33/50
E367 0.33/50
POWER AMP
SVR TAB
E371 1/50
E370 47/16
D361 MPG06G
D362 MPG06G
D363 MPG06G
D364 MPG06G
D368 MPG06G
D367 MPG06G
D366 MPG06G
D365 MPG06G
C361 0.1
E507 4700/16(○△□) 2200/16(●)
ET504
Assy.,ISO Connector
(-1:OPEN,-2:SPEAKER,-3:POWER)
(REAR L+)
(FRONT L+)
(FRONT R+)
(REAR R+)
(REAR R-)
(FRONT R-)
(FRONT L-)
(REAR L-)
(ACC)
(P.ANT)
15A(○△□)
7.5A(●)
(BATT)
(GND)
*●(ET504-2) 1~8Pin:NC
R834 1K-1/4W
C831 100P
R835 10K-1/4W
C832 0.1
Q833 FMC2
R373 10K
E369 1/50
L501 CHOKE
Q871 2SD2008
R871 3.9K-1/4W
C871 0.01
ZD871 HZS6B1L
E871 1/50
REGULATOR+5V
BATTERY DETECTOR
Q506 2SC3421
Q504 2SB1243
AUDIO+B
R556 10K-1/4W
E504 330/16
R562 1K-1/4W
R560 1.8K-1/4W
R559 1.8K-1/4W
R558 1.8K-1/4W
R557 1.8K-1/4W
ZD502 HZS9B3L
E503 10/16(○) 1/50(●) 4.7/35(△) 2.2/50(□)
E505 220/16
Q505 DTC143XK
LED+B
R561 100K
Q509 2SB1243
R569 2.2K-1/4W
R568 10K
E506 100/16
Q510 DTC124K
LAMP+B
POWER ANTENNA & OUT REMOTE SWITCHING
R564 270-1/4W
R565 270-1/4W
D502 MPG06G
D503 DSA3A4
(+B)
(IN-INT)
(OUT-REMO)
(31)
(47)
(GND)
(S.GND)
JK503 AI-NET Connector
(BUS+)
(BUS-)
(ACC)
(BATT)
(R)
○△□
Q887 2SD2096
LCD+B
ZD882 HZS9C2L
C881 0.01
Q888 2SD601A
R896 1.2K
R895 470-1/4W
ZD881 HZS9C3L
○●△
R897 9.1-1/4W
R888 9.1-1/4W
R889 9.1-1/4W
R890 9.1-1/4W
Q885 2SA1037K
Q881 2SB1243
R894 10K
R892 10K
R893 2.2K-1/4W
E881 10/16
Q886 DTC124K
R884 10K
R899 1.8K-1/4W
R883 1.8K-1/4W
D882 DA204K
R891 10K
Q882 DTC114K
D881 MPG06G
R881 10K
ISOLATOR AMP
R307 12K
(2/2)
(1/2)
IC301 XRA4560F(○) M5218AFP(●) XRA4558FH(△□)
R303 22K
E303 10/16
R301 22K
E301 10/16
R305 12K
R306 12K
E305 10/16
R302 22K
E302 10/16
R304 22K
E304 10/16
R308 12K
(REAR L+)
(REAR R+)
S501 AI-NET・NORM /(EQ/DIV)
R566 47K

IC301

1~3	4.3V	CD Changer
4	0V	
5~7	4.3V	CD Changer
8	8.6V	

○△□IC361

1, 2	0V		14, 15	Audio	
3	Audio		16	5V	FM
4	5V/0V	PWR IC ON/OFF	17	Audio	
5	Audio		18	0V	
6	13.8V		19	Audio	
7	Audio		20	13.8V	
8	0V		21	Audio	
9	Audio		22	0V/5V	MUTE ON/OFF
10	5V	FM	23	Audio	
11, 12	Audio		24, 25	NC	
13	0V				

IC851

1	DATA	CD Changer
2	2.98V	CD Changer
3	0V	CD Changer
4	0V	
5	DATA	CD Changer
6	0V	CD Changer
7	5V	CD Changer
8	5V	

IC871

1	5V
2	5V
3	0V

	1	2	3	4	5	MODE
Q503	NC	5V/0V	5V/5V	5V/0V	0V/0V	POWER ON/OFF
Q507	NC	5V/0V	5V/5V	5V/0V	0V/0V	ACC ON/OFF
Q832	0V/13.8V	13.8V/0V	13.8V/13.8V	5V/0V	0V/0V	MUTE ON/OFF
Q833	NC	13.8V/0V	13.8V/13.8V	5V/0V	0V/0V	IF MUTE ON/OFF

	E	C	B	MODE
Q504	13.8V/13.8V	12V/0V	0V/13V	POWER ON/OFF
Q505	0V/0V	0V/13.8V	5V/0V	POWER ON/OFF
Q506	8.6V/0V	13.8V/13.8V	0V/9.2V	POWER ON/OFF
○●Q508	5V/5V	0V/4.9V	0V/4.9V	IN-INT ON/OFF
●Q509	13.7V/13.7V	13.7V/0V	0V/13V	POWER ON/OFF
●Q510	5V/5V	0V/13V	5V/0V	POWER ON/OFF
Q831	0V/9.1V	0V/0V	6.5V/0V	ACC ON/OFF
Q834	0V/0V	4.2V/0V	13.8V/13.8V	POWER ON/OFF
○△□Q835	5.4V	0V	0V	
Q851	5V	2V	5V	CD Changer
Q852	0V	2.99V	0V	CD Changer
Q853	5V/5V	2V/0V	5V/0V	RESET ON/OFF
Q871	5V	13.8V	5.6V	
Q872	5V/5V	5V/0V	0V/5V	ACC ON/OFF
Q873	0V/0V	0V/5V	5.6V/0V	ACC ON/OFF
Q881	13.7V	13.6V	13V	POWER ON
Q882	0V	7V	0V	POWER ON
Q885	13.7V	0V	13.7V	POWER ON
Q886	0V	13.6V	0V	POWER ON
Q887	13.8V/0V	13.8V/13.8V	0V/5V	POWER ON/OFF
○●△Q888	9.5V	13.8V	0.6V	

<Measuring Conditions>

1. Power Supply Voltage : DC14V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

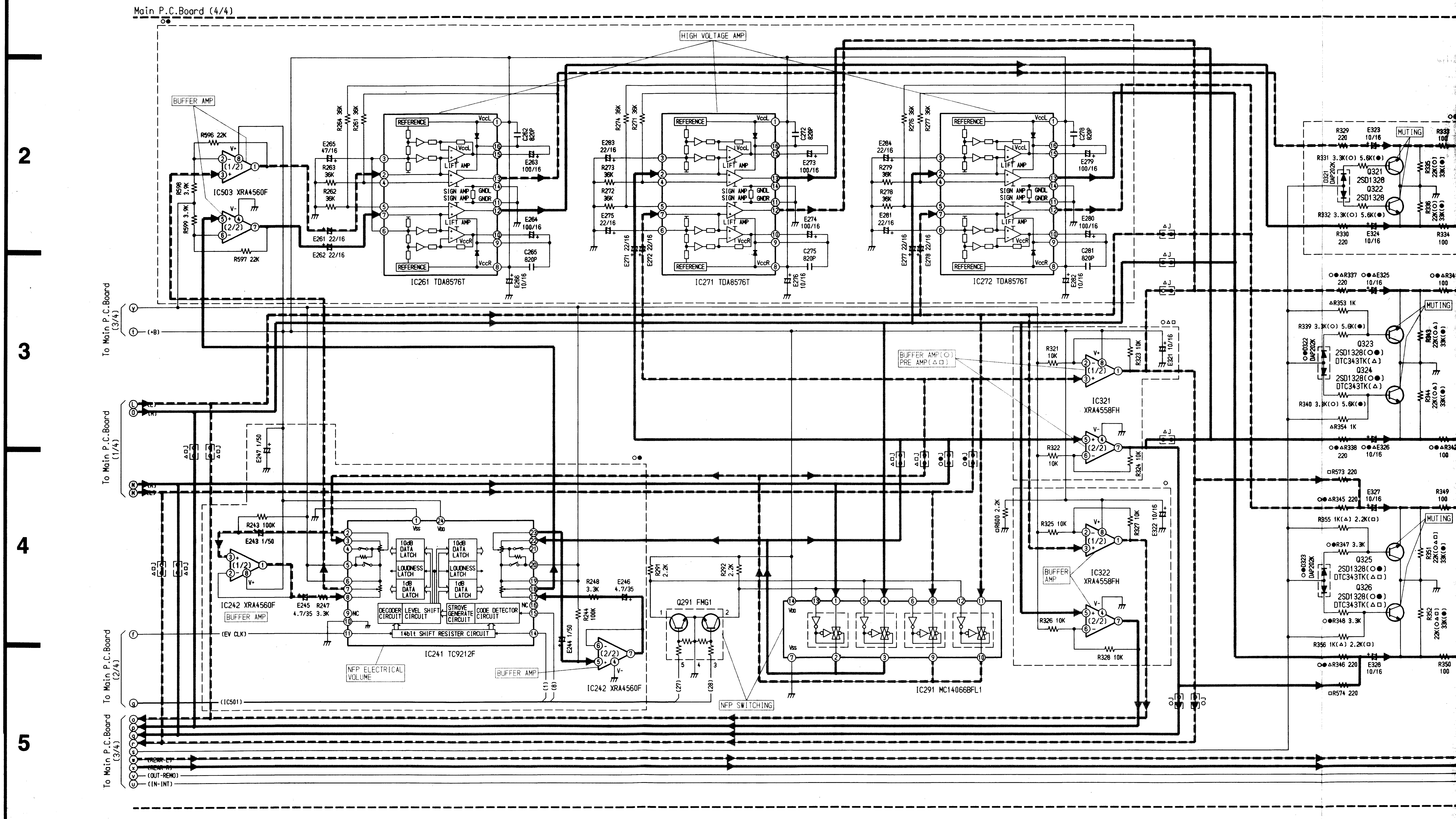
NOTE: ○: For TDA-7556R Model Only,
●: For TDA-7659R Model Only,
△: For TDA-7552R Model Only,
□: For TDA-7550R Model Only,
Others : Common.

NOTE:

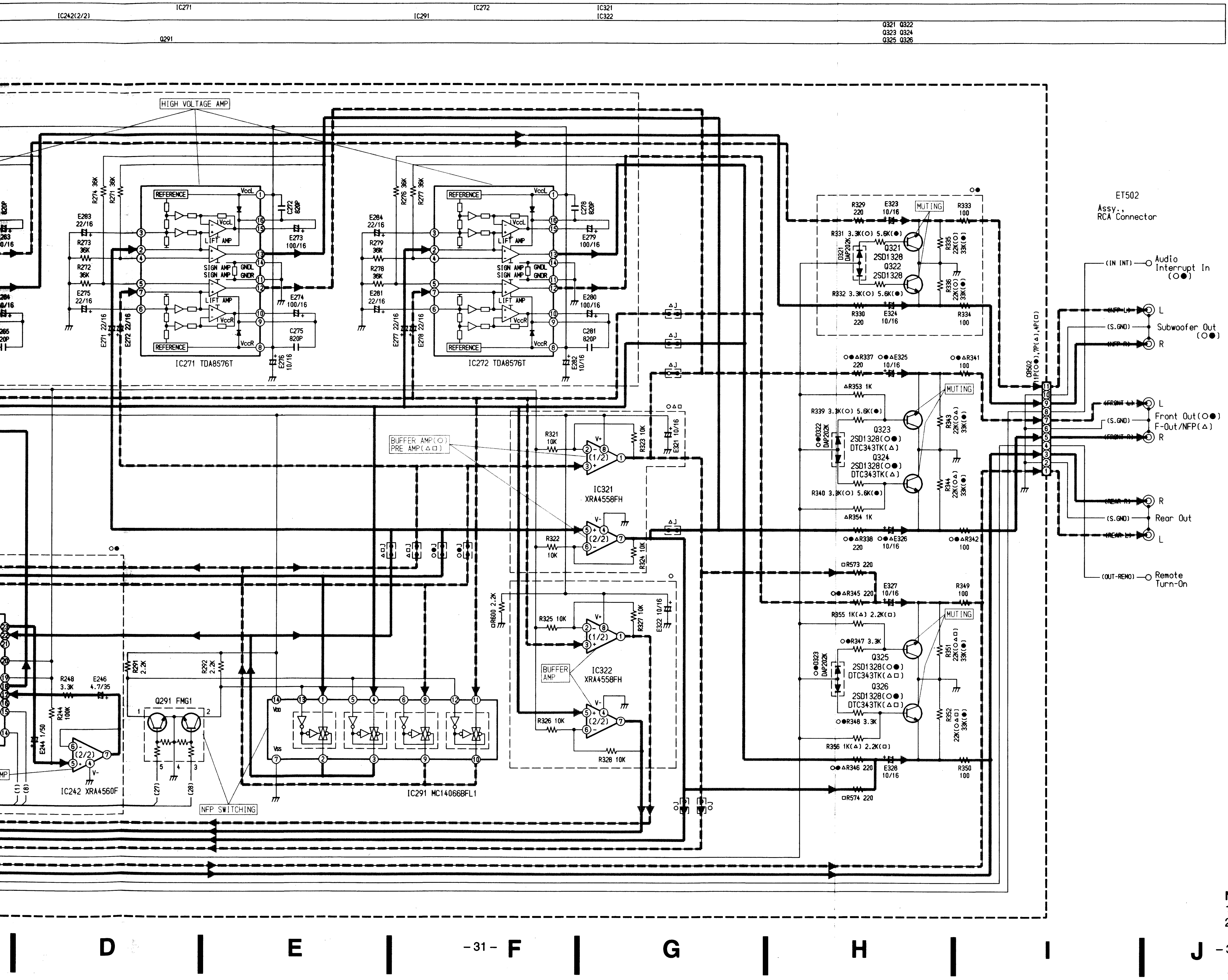
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (4/6)

IC	IC503 IC242(1/2) IC261 IC241 IC242(2/2) IC271 IC291 IC272 IC321 IC322
Transistor (Q)	Q291 Q321 Q322 Q323 Q324 Q325 Q326


1
2
3
4
5
Main P.C.Board (4/4)
HIGH VOLTAGE AMP
BUFFER AMP
R596 22K
R598 3.9K
R599 3.9K
R597 22K
IC503 XRA4560F
(1/2)
(2/2)
E265 47/16
R263 36K
R262 36K
R264 36K
R261 36K
E261 22/16
E262 22/16
REFERENCE
VccL
VccR
LIFT AMP
SIGN AMP
GNDL
GNDR
C262 820P
E263 100/16
E264 100/16
C265 820P
E266 10/16
IC261 TDA8576T
R274 36K
R271 36K
E283 22/16
R273 36K
R272 36K
E275 22/16
E271 22/16
E272 22/16
C272 820P
E273 100/16
E274 100/16
C275 820P
E276 10/16
IC271 TDA8576T
R276 36K
R277 36K
E284 22/16
R279 36K
R278 36K
E281 22/16
E277 22/16
E278 22/16
C278 820P
E279 100/16
E280 100/16
C281 820P
E282 10/16
IC272 TDA8576T
R329 220
E323 10/16
MUTING
R333 100
R331 3.3K(○) 5.6K(●)
D321 DAP202K
Q321 2SD1328
Q322 2SD1328
R335 22K(○) 33K(●)
R336 22K(○) 33K(●)
R332 3.3K(○) 5.6K(●)
R330 220
E324 10/16
R334 100
○●ΔR337 220
○●ΔE325 10/16
○●ΔR341 100
ΔR353 1K
R339 3.3K(○) 5.6K(●)
○●D322 DAP202K
Q323 2SD1328(○●) DTC343TK(Δ)
Q324 2SD1328(○●) DTC343TK(Δ)
R343 22K(○Δ) 33K(●)
R344 22K(○Δ) 33K(●)
R340 3.3K(○) 5.6K(●)
ΔR354 1K
○●ΔR338 220
○●ΔE326 10/16
○●ΔR342 100
ΔJ
○Δ□
BUFFER AMP(○)
PRE AMP(Δ□)
R321 10K
R323 10K
E321 10/16
IC321 XRA4558FH
R322 10K
R324 10K
○
□R573 220
○●ΔR345 220
E327 10/16
R349 100
R355 1K(Δ) 2.2K(□)
○●R347 3.3K
○●D323 DAP202K
Q325 2SD1328(○●) DTC343TK(Δ□)
Q326 2SD1328(○●) DTC343TK(Δ□)
R351 22K(○Δ□) 33K(●)
R352 22K(○Δ□) 33K(●)
○●R348 3.3K
R356 1K(Δ) 2.2K(□)
○●ΔR346 220
E328 10/16
R350 100
□R574 220
□R600 2.2K
R325 10K
R327 10K
E322 10/16
BUFFER AMP
IC322 XRA4558FH
R326 10K
R328 10K
To Main P.C.Board (3/4)
(+B)
To Main P.C.Board (1/4)
(L)
(R)
To Main P.C.Board (2/4)
(EV CLK)
(IC501)
To Main P.C.Board (3/4)
(REAR L)
(REAR R)
(OUT-REMO)
(IN-INT)
E247 1/50
○●
R243 100K
E243 1/50
IC242 XRA4560F
BUFFER AMP
E245 4.7/35
R247 3.3K
Vss
VDD
10dB DATA LATCH
LOUDNESS LATCH
1dB DATA LATCH
DECODER CIRCUIT
LEVEL SHIFT CIRCUIT
STROVE GENERATE CIRCUIT
CODE DETECTOR CIRCUIT
14bit SHIFT RESISTER CIRCUIT
NC
IC241 TC9212F
NFP ELECTRICAL VOLUME
BUFFER AMP
R248 3.3K
E246 4.7/35
R244 100K
E244 1/50
IC242 XRA4560F
(1)
(8)
(27)
(28)
R291 2.2K
R292 2.2K
Q291 FMG1
NFP SWITCHING
IC291 MC14066BFL1
Vdd
Vss

A | B | C | D | E | F | G | H


IC242(2/2)
IC271
IC291
IC272
IC321
IC322
Q291
Q321 Q322
Q323 Q324
Q325 Q326
HIGH VOLTAGE AMP
REFERENCE
LIFT AMP
SIGN AMP
VccL
VccR
GNDL
GNDR
IC271 TDA8576T
IC272 TDA8576T
E283 22/16
E273 100/16
E274 100/16
E275 22/16
E284 22/16
E279 100/16
E280 100/16
E281 22/16
R274 36K
R271 36K
R273 36K
R272 36K
R276 36K
R277 36K
R279 36K
R278 36K
C272 820P
C275 820P
C278 820P
C281 820P
E276 10/16
E282 10/16
E271 22/16
E272 22/16
E277 22/16
E278 22/16
BUFFER AMP(○)
PRE AMP(△□)
R321 10K
R323 10K
E321 10/16
IC321 XRA4558FH
R322 10K
R324 10K
R325 10K
R327 10K
E322 10/16
BUFFER AMP
IC322 XRA4558FH
R326 10K
R328 10K
R600 2.2K
R291 2.2K
R292 2.2K
Q291 FMG1
R248 3.3K
E246 4.7/35
R244 100K
E244 1/50
IC242 XRA4560F
IC291 MC14066BFL1
NFP SWITCHING
Vdd
Vss
MUTING
R329 220
E323 10/16
R333 100
R331 3.3K(○) 5.6K(●)
Q321 2SD1328
Q322 2SD1328
R332 3.3K(○) 5.6K(●)
D321 DAP202K
R335 22K(○) 33K(●)
R336 22K(○) 33K(●)
R330 220
E324 10/16
R334 100
○●△R337 220
○●△E325 10/16
○●△R341 100
△R353 1K
R339 3.3K(○) 5.6K(●)
○●D322 DAP202K
Q323 2SD1328(○●) DTC343TK(△)
Q324 2SD1328(○●) DTC343TK(△)
R340 3.3K(○) 5.6K(●)
R343 22K(○△) 33K(●)
R344 22K(○△) 33K(●)
△R354 1K
○●△R338 220
○●△E326 10/16
○●△R342 100
□R573 220
○●△R345 220
E327 10/16
R349 100
R355 1K(△) 2.2K(□)
○●R347 3.3K
○●D323 DAP202K
Q325 2SD1328(○●) DTC343TK(△□)
Q326 2SD1328(○●) DTC343TK(△□)
○●R348 3.3K
R356 1K(△) 2.2K(□)
R351 22K(○△□) 33K(●)
R352 22K(○△□) 33K(●)
○●△R346 220
E328 10/16
R350 100
□R574 220
CB502 11P(○●),7P(△),4P(□)
ET502
Assy.,
RCA Connector
(IN INT)
Audio Interrupt In (○●)
(NFP-L)
(S.GND)
(NFP-R)
Subwoofer Out (○●)
(FRONT-L)
(FRONT-R)
Front Out(○●)
F-Out/NFP(△)
(REAR-R)
(REAR-L)
Rear Out
(OUT-REMO)
Remote Turn-On
L
R
○●
○△□
△J
○J
○□J
(27)
(28)
(1)
(8)
D
E
F
G
H
I

○●IC241			
1	0V	13	NC
2, 3	4.3V	14	5V
4	NC	15	0V
5~8	4.3V	16	NC
9	NC	17~20	4.3V
10	0V	21	NC
11	5V	22, 23	4.3V
12	NC	24	8.6V

○●IC261, 271, 272

1	8.5V	10	2.7V
2, 3	3.6V	11	0V
4, 5	3.5V	12, 13	7.3V
6, 7	3.6V	14	0V
8	8.5V	15	2.6V
9	7.8V	16	7.8V

○●IC242

1~3	4.3V	FM
4	0V	
5~7	4.3V	FM
8	8.6V	

IC291

1~4	Audio	
5, 6	0V/8.5V	NFP SW ON/OFF
7	0V	
8~11	Audio	
12, 13	0V/8.5V	NFP SW ON/OFF
14	8.5V	

○△□IC321
○IC322

1~3	4.3V	FM
4	0V	
5~7	4.3V	FM
8	8.6V	

○●IC503

1~3	4.3V
4	0V
5~7	4.3V
8	8.6V

	1	2	3	4	5	MODE
Q291	DATA	DATA	DATA	0V	DATA	NFP

	E	C	B	MODE
○●Q321	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF
○●Q322	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF
○●△Q323	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF
○●△Q324	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF
Q325	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF
Q326	0V/0V	0V/0V	0V/13.8V	MUTE ON/OFF

<Measuring Conditions>

1. Power Supply Voltage	DC14V
2. Measuring Meter	Digital Multi Meter
3. Measuring Point Reference	Between Ground
4. Measuring Conditions	No Signal Input FM : 98.1MHz AM : 999kHz (MW) TAPE: Blank Tape Play

NOTE: ○ : For TDA-7556R Model Only,
● : For TDA-7659R Model Only,
△ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only,
Others : Common.

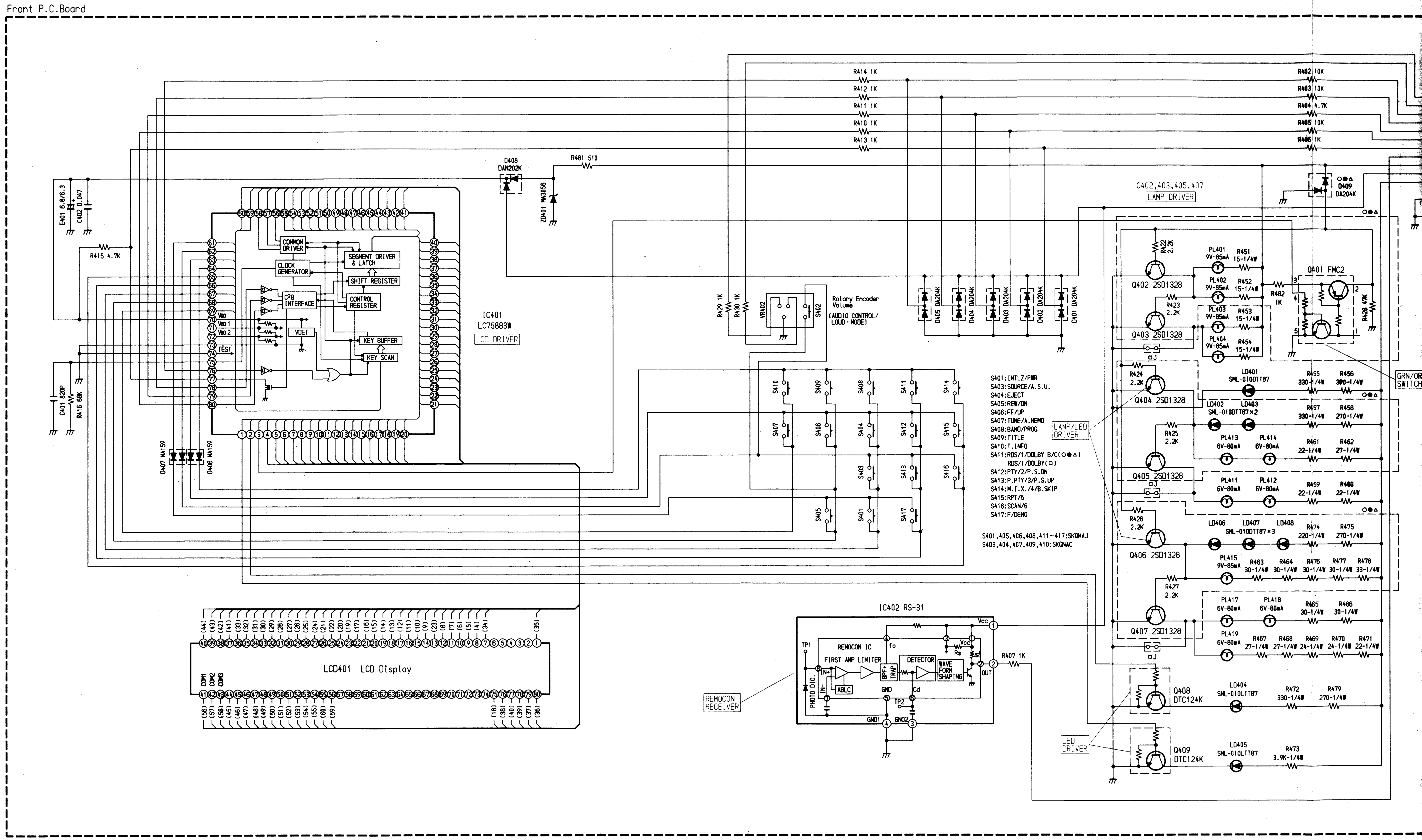
NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1{,}000{,}000}$

J K

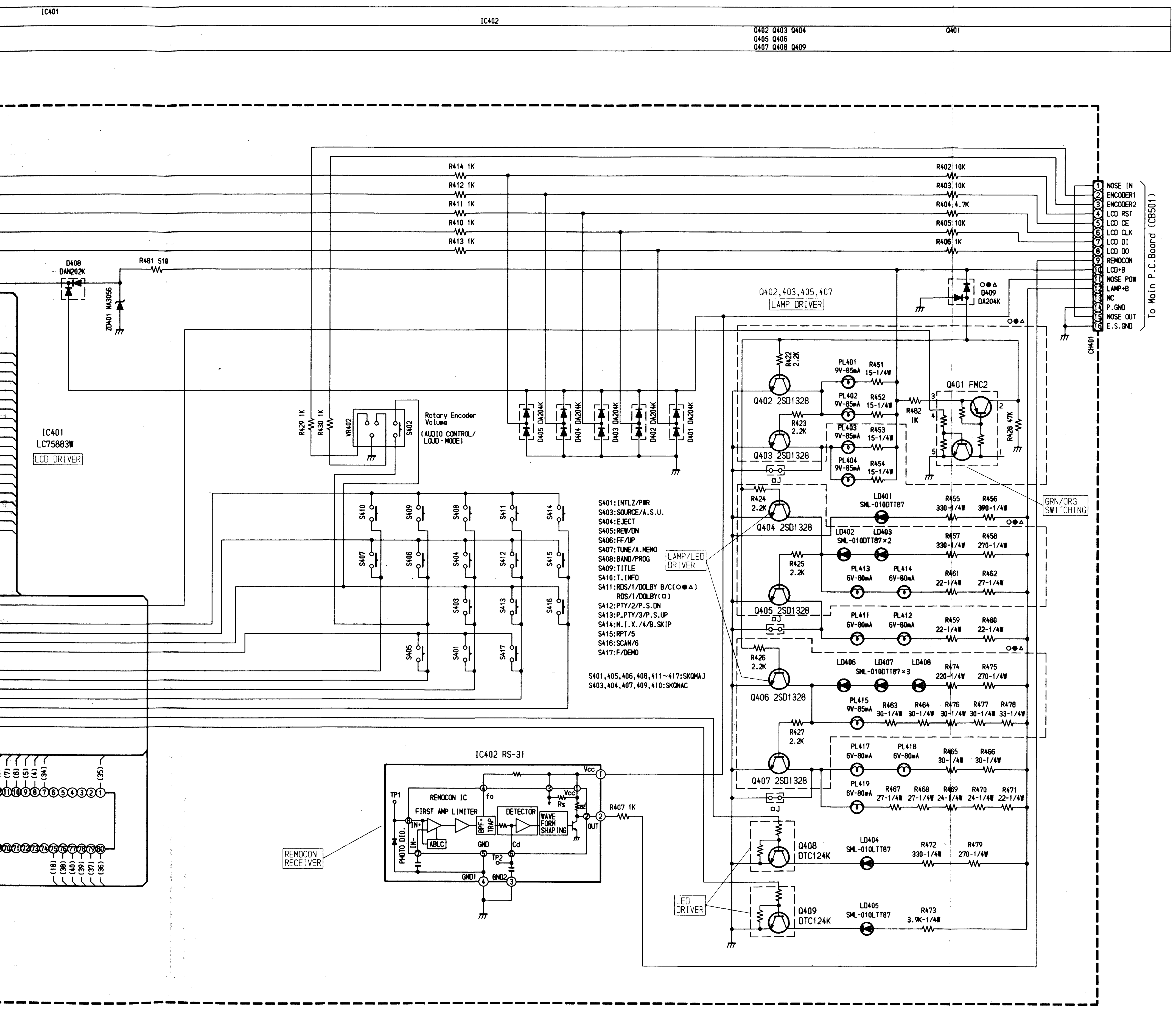
Schematic Diagram (5/6)

IC	IC401	IC402		
Transistor (Q)			Q402 Q403 Q404 Q405 Q406 Q407 Q408 Q409	Q401


Front P.C.Board
R414 1K
R412 1K
R411 1K
R410 1K
R413 1K
R402 10K
R403 10K
R404 4.7K
R405 10K
R406 1K
D408 DAN202K
R481 510
ZD401 MA3056
E401 6.8/6.3
C402 0.047
R415 4.7K
C401 820P
R416 68K
D407 MA159
D406 MA159
COMMON DRIVER
CLOCK GENERATOR
SEGMENT DRIVER & LATCH
SHIFT REGISTER
C²B INTERFACE
CONTROL REGISTER
VDET
KEY BUFFER
KEY SCAN
VDD
VDD 1
VDD 2
TEST
IC401
LC75883W
LCD DRIVER
R429 1K
R430 1K
VR402
S402
Rotary Encoder Volume
(AUDIO CONTROL/ LOUD・MODE)
D405 DA204K
D404 DA204K
D403 DA204K
D402 DA204K
D401 DA204K
S410
S409
S408
S411
S414
S407
S406
S404
S412
S415
S403
S413
S416
S405
S401
S417
Q402,403,405,407
LAMP DRIVER
○●△
D409
DA204K
R422 2.2K
Q402 2SD1328
PL401 9V-85mA
R451 15-1/4W
PL402 9V-85mA
R452 15-1/4W
PL403 9V-85mA
R453 15-1/4W
PL404 9V-85mA
R454 15-1/4W
R423 2.2K
Q403 2SD1328
□J
R482 1K
Q401 FMC2
R428 47K
GRN/OR
SWITCH
R424 2.2K
Q404 2SD1328
LD401 SML-010DTT87
R455 330-1/4W
R456 390-1/4W
LD402 LD403 SML-010DTT87×2
R457 330-1/4W
R458 270-1/4W
LAMP/LED DRIVER
R425 2.2K
PL413 6V-80mA
PL414 6V-80mA
R461 22-1/4W
R462 27-1/4W
Q405 2SD1328
PL411 6V-80mA
PL412 6V-80mA
R459 22-1/4W
R460 22-1/4W
R426 2.2K
LD406 LD407 LD408 SML-010DTT87×3
R474 220-1/4W
R475 270-1/4W
Q406 2SD1328
PL415 9V-85mA
R463 30-1/4W
R464 30-1/4W
R476 30-1/4W
R477 30-1/4W
R478 33-1/4W
R427 2.2K
PL417 6V-80mA
PL418 6V-80mA
R465 30-1/4W
R466 30-1/4W
Q407 2SD1328
PL419 6V-80mA
R467 27-1/4W
R468 27-1/4W
R469 24-1/4W
R470 24-1/4W
R471 22-1/4W
Q408 DTC124K
LD404 SML-010LTT87
R472 330-1/4W
R479 270-1/4W
Q409 DTC124K
LD405 SML-010LTT87
R473 3.9K-1/4W
LED DRIVER
IC402 RS-31
REMOCON IC
FIRST AMP LIMITER
ABLC
BPF+TRAP
DETECTOR
WAVE FORM SHAPING
TP1
TP2
PHOTO DIO.
IN+
IN-
fo
Vcc
Rs
RL
OUT
GND
Cd
GND1
GND2
R407 1K
REMOCON RECEIVER
LCD401 LCD Display
COM1
COM2
COM3

S401:INTLZ/PWR
S403:SOURCE/A.S.U.
S404:EJECT
S405:REW/DN
S406:FF/UP
S407:TUNE/A.MEMO
S408:BAND/PROG
S409:TITLE
S410:T.INFO
S411:RDS/1/DOLBY B/C(○●△)
RDS/1/DOLBY(□)
S412:PTY/2/P.S.DN
S413:P.PTY/3/P.S.UP
S414:M.I.X./4/B.SKIP
S415:RPT/5
S416:SCAN/6
S417:F/DEMO

S401,405,406,408,411~417:SKQMAJ
S403,404,407,409,410:SKQNAC


IC401
IC402
Q402 Q403 Q404
Q405 Q406
Q407 Q408 Q409
Q401
R414 1K
R412 1K
R411 1K
R410 1K
R413 1K
R402 10K
R403 10K
R404 4.7K
R405 10K
R406 1K
NOSE IN
ENCODER1
ENCODER2
LCD RST
LCD CE
LCD CLK
LCD DI
LCD DO
REMOCON
LCD+B
NOSE POW
LAMP+B
NC
P.GND
NOSE OUT
E.S.GND
CH401
To Main P.C.Board (CB501)
D408
DAN202K
R481 510
ZD401 MA3056
D409
DA204K
Q402,403,405,407
LAMP DRIVER
IC401
LC75883W
LCD DRIVER
R429 1K
R430 1K
VR402
S402
Rotary Encoder
Volume
(AUDIO CONTROL/
LOUD・MODE)
D405 DA204K
D404 DA204K
D403 DA204K
D402 DA204K
D401 DA204K
S410
S409
S408
S411
S414
S407
S406
S404
S412
S415
S403
S413
S416
S405
S401
S417
S401:INTLZ/PWR
S403:SOURCE/A.S.U.
S404:EJECT
S405:REW/DN
S406:FF/UP
S407:TUNE/A.MEMO
S408:BAND/PROG
S409:TITLE
S410:T.INFO
S411:RDS/1/DOLBY B/C(○●△)
RDS/1/DOLBY(□)
S412:PTY/2/P.S.DN
S413:P.PTY/3/P.S.UP
S414:M.I.X./4/B.SKIP
S415:RPT/5
S416:SCAN/6
S417:F/DEMO
S401,405,406,408,411~417:SKQMAJ
S403,404,407,409,410:SKQNAC
LAMP/LED
DRIVER
R422 2.2K
Q402 2SD1328
PL401 9V-85mA
R451 15-1/4W
PL402 9V-85mA
R452 15-1/4W
R423 2.2K
PL403 9V-85mA
R453 15-1/4W
PL404 9V-85mA
R454 15-1/4W
Q403 2SD1328
R482 1K
Q401 FMC2
R428 47K
GRN/ORG
SWITCHING
R424 2.2K
Q404 2SD1328
LD401
SML-010DT87
R455 330-1/4W
R456 390-1/4W
LD402
LD403
SML-010DT87×2
R457 330-1/4W
R458 270-1/4W
R425 2.2K
PL413 6V-80mA
PL414 6V-80mA
R461 22-1/4W
R462 27-1/4W
Q405 2SD1328
PL411 6V-80mA
PL412 6V-80mA
R459 22-1/4W
R460 22-1/4W
R426 2.2K
Q406 2SD1328
LD406
LD407
LD408
SML-010DT87×3
R474 220-1/4W
R475 270-1/4W
PL415 9V-85mA
R463 30-1/4W
R464 30-1/4W
R476 30-1/4W
R477 30-1/4W
R478 33-1/4W
R427 2.2K
Q407 2SD1328
PL417 6V-80mA
PL418 6V-80mA
R465 30-1/4W
R466 30-1/4W
PL419 6V-80mA
R467 27-1/4W
R468 27-1/4W
R469 24-1/4W
R470 24-1/4W
R471 22-1/4W
IC402 RS-31
REMOCON IC
FIRST AMP LIMITER
DETECTOR
BPF+TRAP
WAVE FORM SHAPING
ABLC
PHOTO DIO.
TP1
TP2
fo
Vcc
Rs
Cd
GND
GND1
GND2
OUT
R407 1K
REMOCON
RECEIVER
Q408
DTC124K
LD404
SML-010LT87
R472 330-1/4W
R479 270-1/4W
Q409
DTC124K
LD405
SML-010LT87
R473 3.9K-1/4W
LED
DRIVER

IC401

1, 2	5V
3	0V/5V
4~60	DATA
61~69	PS
70	5.6V
71, 72	NC
73, 74	0V
75	OSC
76	5V
77~80	DATA

IC402

1	5V
2	DATA
3	0V
4	0V

	1	2	3	4	5	MODE
○●△Q401	NC	9V/0V	9.6V/9.6V	0V/5V	0V/0V	GRN/ORG

	E	C	B	MODE
○●△Q402	0V/0V	13.8V/0V	0V/9V	GRN/ORG
○●△Q403	0V/0V	0V/13.8V	13.8V/0V	GRN/ORG
○●△Q404	0V/0V	13.8V/0V	0V/9V	GRN/ORG
○●△Q405	0V/0V	0V/13.8V	13.8V/0V	GRN/ORG
○●△Q406	0V/0V	13.8V/0V	0V/9V	GRN/ORG
○●△Q407	0V/0V	0V/13.8V	13.8V/0V	GRN/ORG
Q408	0V	0V	5V	
Q409	0V	0V	5V	

<Measuring Conditions>

1. Power Supply Voltage : DC14V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
   FM : 98.1MHz
   AM : 999kHz (MW)
   TAPE: Blank Tape Play

NOTE: ○: For TDA-7556R Model Only,
●: For TDA-7659R Model Only,
△: For TDA-7552R Model Only,
□: For TDA-7550R Model Only,
Others : Common.

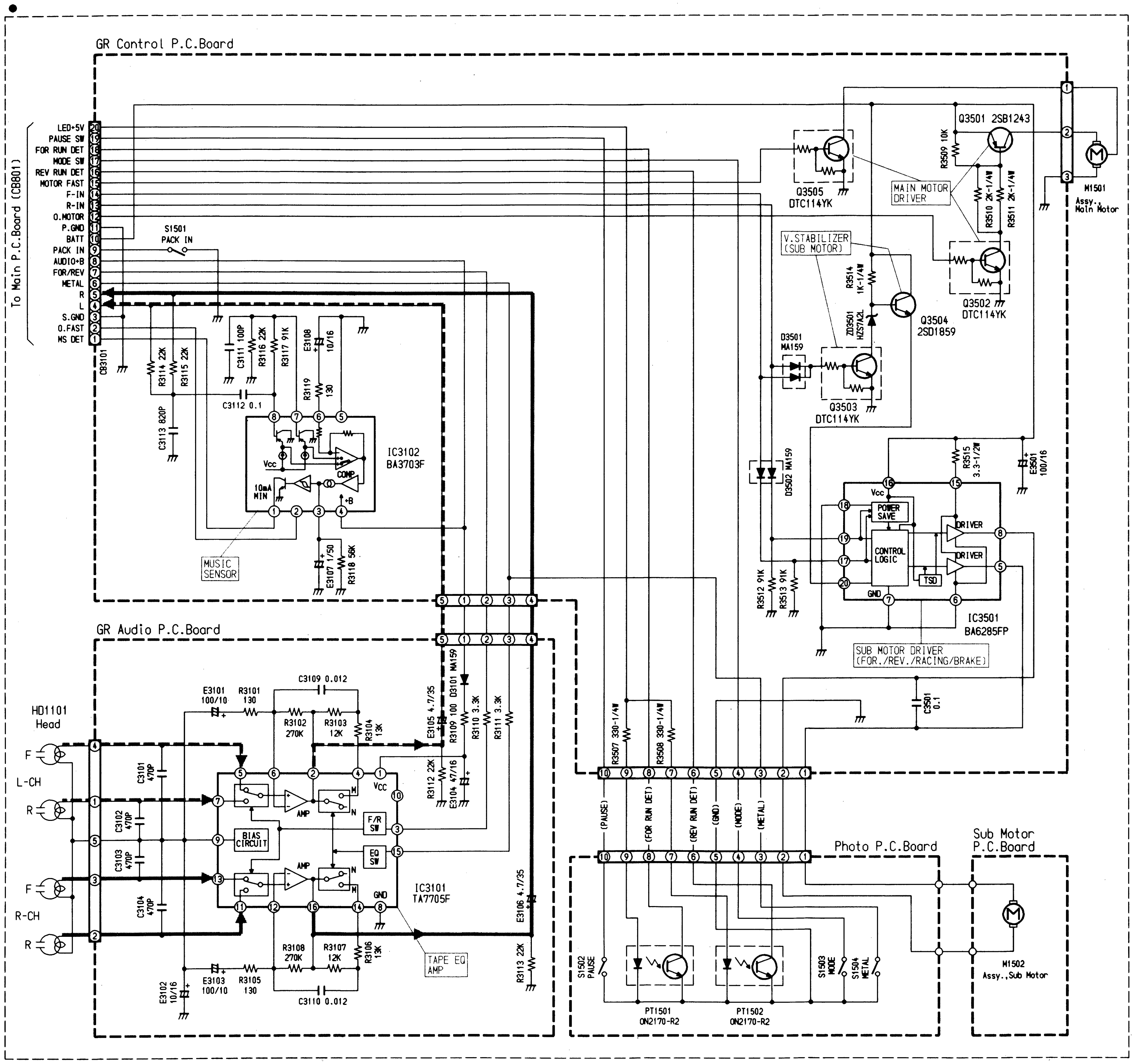
NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

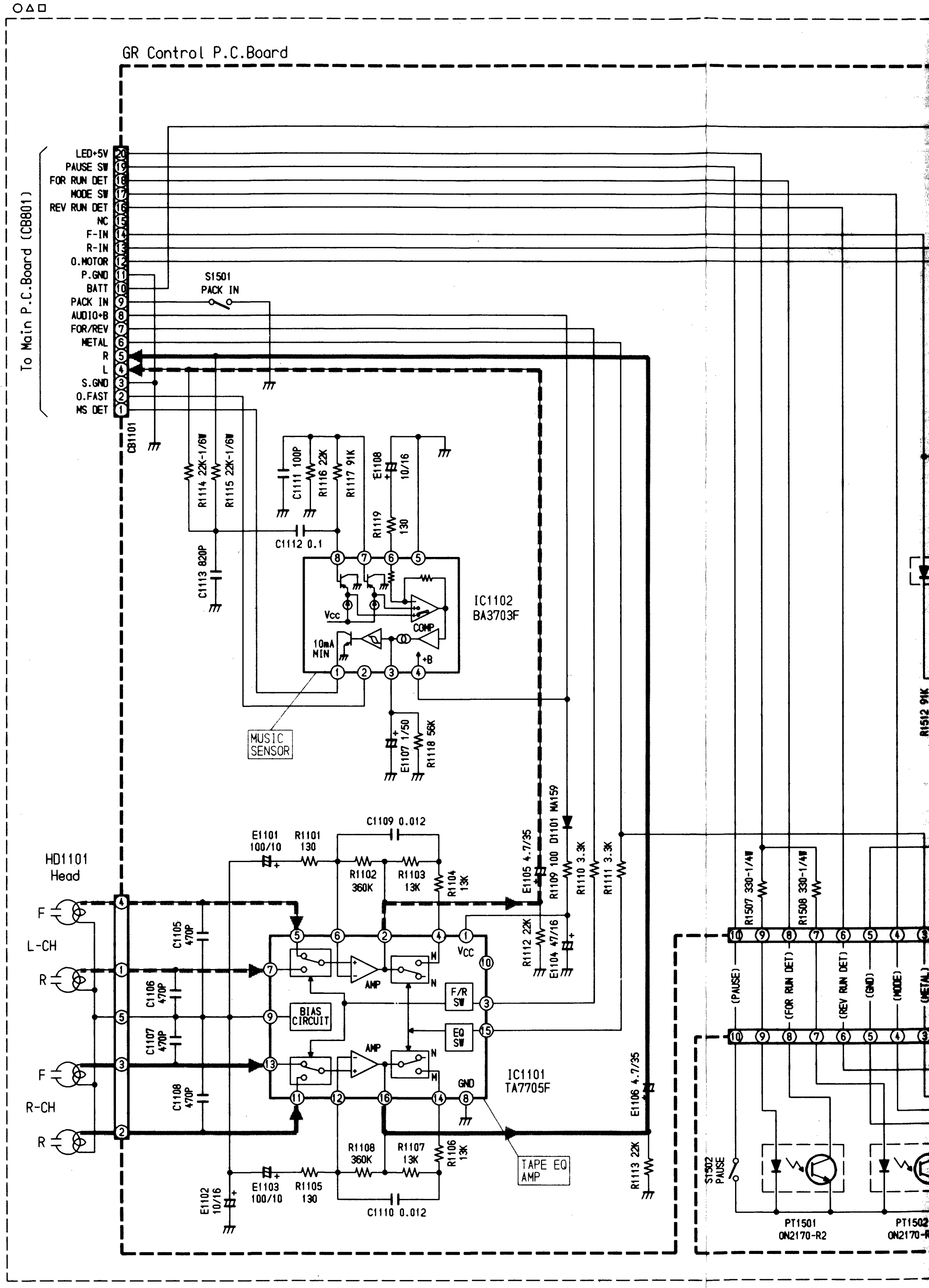
Schematic Diagram (6/6)

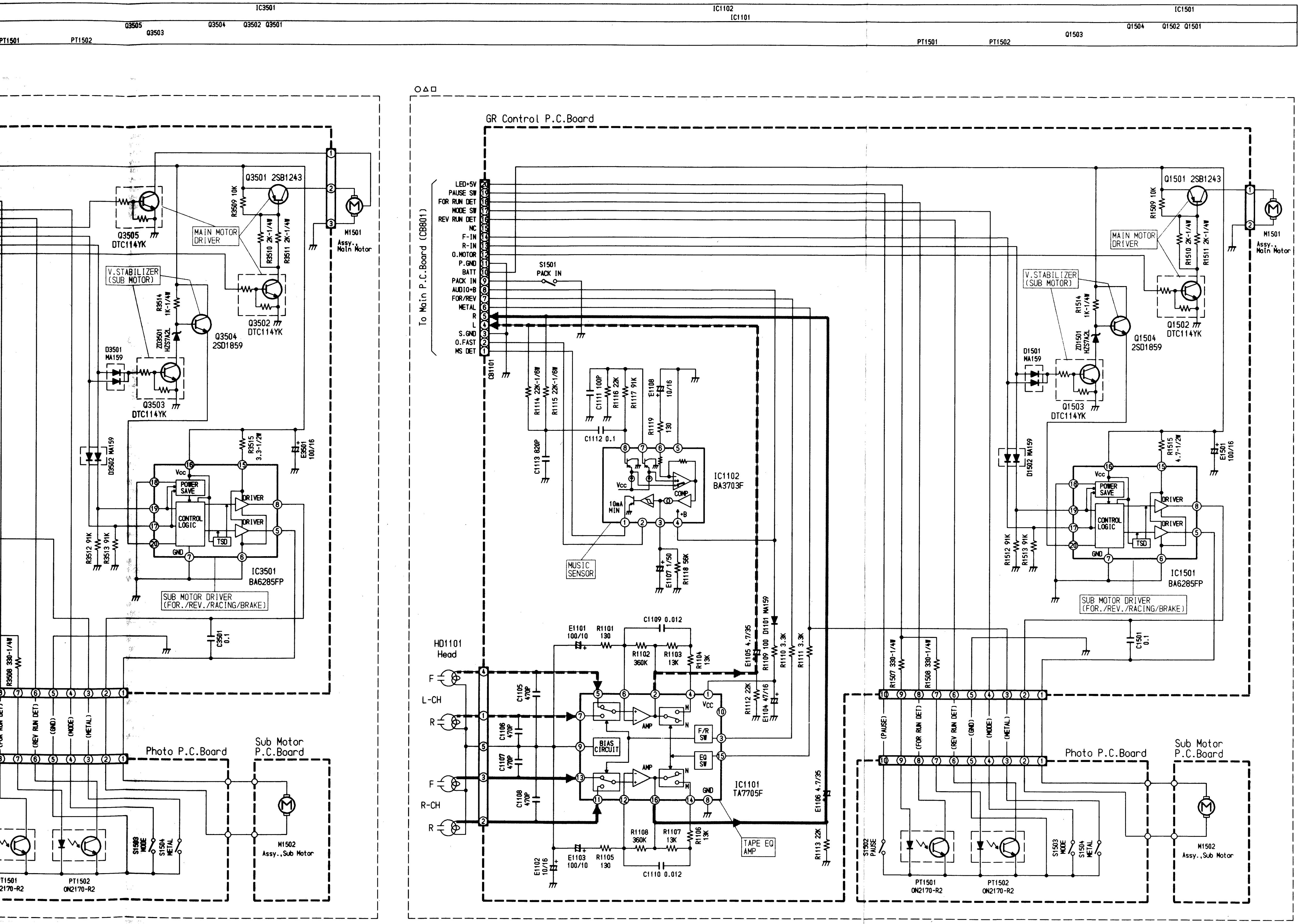
IC	IC3102 IC3101 IC3501 IC1102 IC1101
Transistor (Q,PT)	PT1501 PT1502 Q3505 Q3503 Q3504 Q3502 Q3501 PT1501 PT1502

●


GR Control P.C.Board
To Main P.C.Board (CB801)
LED+5V
PAUSE SW
FOR RUN DET
MODE SW
REV RUN DET
MOTOR FAST
F-IN
R-IN
O.MOTOR
P.GND
BATT
PACK IN
AUDIO+B
FOR/REV
METAL
R
L
S.GND
O.FAST
MS DET
CB3101
S1501
PACK IN
R3114 22K
R3115 22K
C3111 100P
R3116 22K
R3117 91K
E3108 10/16
C3112 0.1
R3119 130
C3113 820P
IC3102
BA3703F
Vcc
10mA
MIN
COMP
+B
MUSIC SENSOR
E3107 1/50
R3118 56K
Q3505
DTC114YK
MAIN MOTOR DRIVER
Q3501 2SB1243
R3509 10K
R3510 2K-1/4W
R3511 2K-1/4W
Q3502
DTC114YK
M1501
Assy., Main Motor
V.STABILIZER (SUB MOTOR)
R3514 1K-1/4W
ZD3501 HZS7A2L
Q3504
2SD1859
D3501
MA159
Q3503
DTC114YK
D3502 MA159
R3515 3.3-1/2W
E3501 100/16
POWER SAVE
CONTROL LOGIC
DRIVER
DRIVER
TSD
GND
IC3501
BA6285FP
R3512 91K
R3513 91K
SUB MOTOR DRIVER (FOR./REV./RACING/BRAKE)
C3501 0.1
GR Audio P.C.Board
HD1101
Head
L-CH
R-CH
F
R
E3101 100/10
R3101 130
C3109 0.012
R3102 270K
R3103 12K
R3104 13K
C3101 470P
C3102 470P
C3103 470P
C3104 470P
AMP
BIAS CIRCUIT
F/R SW
EQ SW
Vcc
GND
IC3101
TA7705F
E3105 4.7/35
R3109 100
D3101 MA159
R3110 3.3K
R3111 3.3K
R3112 22K
E3104 47/16
R3108 270K
R3107 12K
R3106 13K
E3102 10/16
E3103 100/10
R3105 130
C3110 0.012
TAPE EQ AMP
E3106 4.7/35
R3113 22K
R3507 330-1/4W
R3508 330-1/4W
(PAUSE)
(FOR RUN DET)
(REV RUN DET)
(GND)
(MODE)
(METAL)
Photo P.C.Board
Sub Motor P.C.Board
S1502 PAUSE
PT1501
ON2170-R2
PT1502
ON2170-R2
S1503 MODE
S1504 METAL
M1502
Assy.,Sub Motor

○△□


GR Control P.C.Board
To Main P.C.Board (CB801)
LED+5V
PAUSE SW
FOR RUN DET
MODE SW
REV RUN DET
NC
F-IN
R-IN
O.MOTOR
P.GND
BATT
PACK IN
AUDIO+B
FOR/REV
METAL
R
L
S.GND
O.FAST
MS DET
CB1101
S1501
PACK IN
R1114 22K-1/6W
R1115 22K-1/6W
C1111 100P
R1116 22K
R1117 91K
E1108 10/16
R1119 130
C1112 0.1
C1113 820P
IC1102
BA3703F
Vcc
10mA
MIN
COMP
+B
MUSIC SENSOR
E1107 1/50
R1118 56K
R1512 91K
HD1101
Head
L-CH
R-CH
F
R
E1101 100/10
R1101 130
C1109 0.012
R1102 360K
R1103 13K
R1104 13K
C1105 470P
C1106 470P
C1107 470P
C1108 470P
AMP
BIAS CIRCUIT
F/R SW
EQ SW
Vcc
GND
IC1101
TA7705F
E1105 4.7/35
R1109 100
D1101 MA159
R1110 3.3K
R1111 3.3K
R1112 22K
E1104 47/16
R1108 360K
R1107 13K
R1106 13K
E1102 10/16
E1103 100/10
R1105 130
C1110 0.012
TAPE EQ AMP
E1106 4.7/35
R1113 22K
R1507 330-1/4W
R1508 330-1/4W
(PAUSE)
(FOR RUN DET)
(REV RUN DET)
(GND)
(MODE)
(METAL)
S1502 PAUSE
PT1501
ON2170-R2
PT1502
ON2170-R2


IC3501
Q3505
Q3503
Q3504
Q3502 Q3501
PT1501
PT1502
IC1102
IC1101
IC1501
Q1504
Q1502 Q1501
Q1503
○△□
GR Control P.C.Board
To Main P.C.Board (CB801)
LED+5V 20
PAUSE SW 19
FOR RUN DET 18
MODE SW 17
REV RUN DET 16
NC 15
F-IN 14
R-IN 13
O.MOTOR 12
P.GND 11
BATT 10
PACK IN 9
AUDIO+B 8
FOR/REV 7
METAL 6
R 5
L 4
S.GND 3
O.FAST 2
MS DET 1
CB1101
S1501
PACK IN
R1114 22K-1/6W
R1115 22K-1/6W
C1111 100P
R1116 22K
R1117 91K
E1108 10/16
R1119 130
C1112 0.1
C1113 820P
IC1102
BA3703F
Vcc
10mA MIN
COMP
+B
MUSIC SENSOR
E1107 1/50
R1118 56K
HD1101
Head
L-CH
R-CH
F
R
C1105 470P
C1106 470P
C1107 470P
C1108 470P
E1101 100/10
R1101 130
C1109 0.012
R1102 360K
R1103 13K
R1104 13K
BIAS CIRCUIT
AMP
F/R SW
EQ SW
Vcc
GND
IC1101
TA7705F
E1102 10/16
E1103 100/10
R1105 130
R1108 360K
R1107 13K
R1106 13K
C1110 0.012
TAPE EQ AMP
E1105 4.7/35
R1109 100
D1101 MA159
R1110 3.3K
R1111 3.3K
R1112 22K
E1104 47/16
E1106 4.7/35
R1113 22K
Q1501 2SB1243
R1509 10K
R1510 2K-1/4W
R1511 2K-1/4W
MAIN MOTOR DRIVER
M1501
Assy.,
Main Motor
V.STABILIZER (SUB MOTOR)
R1514 1K-1/4W
ZD1501 HZS7A2L
Q1504
2SD1859
Q1502
DTC114YK
D1501
MA159
Q1503
DTC114YK
D1502 MA159
R1515 4.7-1/2W
E1501 100/16
POWER SAVE
CONTROL LOGIC
DRIVER
TSD
R1512 91K
R1513 91K
IC1501
BA6285FP
SUB MOTOR DRIVER
(FOR./REV./RACING/BRAKE)
C1501 0.1
R1507 330-1/4W
R1508 330-1/4W
(PAUSE)
(FOR RUN DET)
(REV RUN DET)
(GND)
(MODE)
(METAL)
Photo P.C.Board
Sub Motor
P.C.Board
S1502
PAUSE
PT1501
ON2170-R2
PT1502
ON2170-R2
S1503
MODE
S1504
METAL
M1502
Assy.,Sub Motor
Q3501 2SB1243
R3509 10K
R3510 2K-1/4W
R3511 2K-1/4W
Q3505
DTC114YK
M1501
Assy.,
Main Motor
V.STABILIZER (SUB MOTOR)
R3514 1K-1/4W
ZD3501 HZS7A2L
Q3504
2SD1859
Q3502
DTC114YK
D3501
MA159
Q3503
DTC114YK
D3502 MA159
R3515 3.3-1/2W
E3501 100/16
R3512 91K
R3513 91K
IC3501
BA6285FP
C3501 0.1
R3508 330-1/4W
(REV RUN DET)
(GND)
(MODE)
(METAL)
S1503 MODE
S1504 METAL
PT1501
PT1502
ON2170-R2
M1502
Assy.,Sub Motor

○△□IC1101 ●IC3101			
1	10.7V	9	3V
2	3.1V	10	NC
3	5.2V	11	3V
4	3.1V	12	3V
5	3V	13	3V
6	3V	14	3.1V
7	3V	15	0V
8	0V	16	3.1V

○△□IC1102 ●IC3102	
1	5.2V
2	0V
3	0V
4	12V
5	0V
6	0.6V
7	0V
8	0V

○△□IC1501 ●IC3501	
1~4	NC
5~8	0V
9~14	NC
15	12V
16	12V
17~19	0V
20	12V
21~24	NC

	E	C	B
○△□Q1501	12V	11.8V	11.3V
○△□Q1502	0V	0.1V	5V
○△□Q1503	0V	5.5V	0V
○△□Q1504	11.6V	12V	12V
●Q3501	12V	11.8V	11.3V
●Q3502	0V	0.1V	5V
●Q3503	0V	5.5V	0V
●Q3504	11.6V	12V	12V
●Q3505	0V	0.5V	0V

<Measuring Conditions>

1. Power Supply Voltage : DC12V
2. Measuring Meter : Digital Multi Meter
3. Measuring Point Reference : Between Ground
4. Measuring Conditions : No Signal Input
FM : 98.1MHz
AM : 999kHz (MW)
TAPE: Blank Tape Play

NOTE: ○: For TDA-7556R Model Only,
●: For TDA-7659R Model Only,
△: For TDA-7552R Model Only,
□: For TDA-7550R Model Only,
Others : Common.

NOTE:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads.

$$P = \frac{1}{1,000,000}$$

Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor : μF=microfarads,pF=picofarads

Abbreviations

RES.= Resistor
C.F.= Carbon Film
M.F.= Metal Film
M.O.= Metal Oxide Film
M.P.= Metal Plate
TR. = Transistor
TRANS.= Transformer
CP. = Chip

CAP.= Capacitor
ELY.= Electrolytic
CER.= Ceramic
MYL.= Mylar
TAN.= Tantalum
POLY.= Polystyrol
PP. = Polypropylene
PLT.= Polyethylene
PF. = Polyester Film

Main P.C.Board

IC's

	Symbol No.	Part No.	Description
○	IC006	51T67915F01	M51143AL
●	IC006	51T67915F01	M51143AL
△	IC006	51T67915F01	M51143AL
	IC021	51T93336F01	NJM4558M
	IC022	51T40941U03	MC14066BFL1
	IC041	51T35504W02	LC7219
	IC061	51T55054W02	SAA6579T
	IC071	51T93336F01	NJM4558M
○	IC201	51T85167W01	CXA2502M
●	IC201	51T85167W01	CXA2502M
△	IC201	51T85167W01	CXA2502M
□	IC201	51T11210W01	CXA1102M
	IC221	51T65131W01	TEA6320T
○	IC222	51T92001F21	XRA4560F
●	IC222	51T92001F21	XRA4560F
△	IC222	51T65379F22	XRA4558FH
□	IC222	51T65379F22	XRA4558FH
○	IC241	51T75584W01	TC9212F
●	IC241	51T75584W01	TC9212F
○	IC242	51T92001F21	XRA4560F
●	IC242	51T92001F21	XRA4560F
○	IC261	51T75464W01	TDA8576T
●	IC261	51T75464W01	TDA8576T
○	IC271	51T75464W01	TDA8576T
●	IC271	51T75464W01	TDA8576T
○	IC272	51T75464W01	TDA8576T
●	IC272	51T75464W01	TDA8576T
	IC291	51T40941U03	MC14066BFL1
○	IC301	51T92001F21	XRA4560F
●	IC301	51T90149F03	M5218AFP
△	IC301	51T65379F22	XRA4558FH
□	IC301	51T65379F22	XRA4558FH
○	IC321	51T65379F22	XRA4558FH
△	IC321	51T65379F22	XRA4558FH
□	IC321	51T65379F22	XRA4558FH
○	IC322	51T65379F22	XRA4558FH
○	IC361	51T85153W01	TDA7384
△	IC361	51T85153W01	TDA7384
□	IC361	51T85153W01	TDA7384
	IC501	51T85151W08	85151W08
	IC502	51T85088W01	85088W01
○	IC503	51T92001F21	XRA4560F
●	IC503	51T92001F21	XRA4560F
	IC821	51T95014F13	S-8052HNM-CR
	IC841	51T65379F22	XRA4558FH
	IC851	51T93332F01	NJM2903M
	IC871	51T95014F09	S-8054ALR-LN

Transistors

	Symbol No.	Part No.	Description
	Q001	48T73888F08	CP., FMG1
	Q002	48T62967F03	CP., DTC124K
	Q003	48T73888F08	CP., FMG1
	Q004	48T73888F08	CP., FMG1
	Q021	48T62967F03	CP., DTC124K
	Q022	48T73888F08	CP., FMG1
	Q061	48T63420F01	CP., 2SA1037K
	Q062	48T62967F03	CP., DTC124K
	Q071	48T63417F01	CP., 2SC2412K
	Q072	48T63420F01	CP., 2SA1037K
	Q091	48T84234F03	2SB1238
	Q092	48T84234F03	2SB1238
	Q093	48T62967F03	CP., DTC124K
	Q094	48T15289W03	2SD2008
	Q095	48T93828F04	2SD1994A
○	Q201	48T94471F03	CP., IMH1
●	Q201	48T94471F03	CP., IMH1
△	Q201	48T94471F03	CP., IMH1
	Q291	48T73888F08	CP., FMG1
○	Q321	48T63788F04	CP., 2SD1328
●	Q321	48T63788F04	CP., 2SD1328
○	Q322	48T63788F04	CP., 2SD1328
●	Q322	48T63788F04	CP., 2SD1328
○	Q323	48T63788F04	CP., 2SD1328
●	Q323	48T63788F04	CP., 2SD1328
△	Q323	48T62967F33	CP., DTC343TK
○	Q324	48T63788F04	CP., 2SD1328
●	Q324	48T63788F04	CP., 2SD1328

NOTE : ○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only, □: For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
△ Q324	48T62967F33	CP., DTC343TK
○ Q325	48T63788F04	CP., 2SD1328
● Q325	48T63788F04	CP., 2SD1328
△ Q325	48T62967F33	CP., DTC343TK
□ Q325	48T62967F33	CP., DTC343TK
○ Q326	48T63788F04	CP., 2SD1328
● Q326	48T63788F04	CP., 2SD1328
△ Q326	48T62967F33	CP., DTC343TK
□ Q326	48T62967F33	CP., DTC343TK
Q501	48T63420F01	CP., 2SA1037K
Q502	48T62967F03	CP., DTC124K
Q503	48T73888F12	CP., FMC2
Q504	48T84366F01	2SB1243
Q505	48T62967F05	CP., DTC143XK
Q506	48T69176F01	2SC3421
Q507	48T73888F12	CP., FMC2
○ Q508	48T62966F01	CP., DTA143
● Q508	48T62966F01	CP., DTA143
● Q509	48T84366F04	2SB1243
● Q510	48T62967F03	CP., DTC124K
Q511	48T62967F23	CP., DTC143TK
Q512	48T62967F23	CP., DTC143TK
Q513	48T62967F23	CP., DTC143TK
○ Q811	48T62967F03	CP., DTC124K
● Q811	48T62967F03	CP., DTC124K
△ Q811	48T62967F03	CP., DTC124K
Q831	48T62967F03	CP., DTC124K
Q832	48T73888F12	CP., FMC2
Q833	48T73888F12	CP., FMC2
Q834	48T62967F03	CP., DTC124K
○ Q835	48T62967F03	CP., DTC124K
△ Q835	48T62967F03	CP., DTC124K
□ Q835	48T62967F03	CP., DTC124K
Q851	48T52437F01	CP., 2SB709A
Q852	48T52438F01	CP., 2SD601A
Q853	48T62966F03	CP., DTA124
Q871	48T15289W04	2SD2008
Q872	48T62966F03	CP., DTA124
Q873	48T62967F09	CP., DTC114TK
Q881	48T84366F04	2SB1243
Q882	48T62967F02	CP., DTC114K
Q885	48T63420F01	CP., 2SA1037K
Q886	48T62967F03	CP., DTC124K
Q887	48T25169W01	2SD2096
○ Q888	48T52438F01	CP., 2SD601A
● Q888	48T52438F01	CP., 2SD601A
△ Q888	48T52438F01	CP., 2SD601A

Symbol No.	Part No.	Description
Diodes / Surge Protector		
D001	48T52446F01	CP., MA151WK
D002	48T52446F01	CP., MA151WK
D003	48T64134F01	CP., DA204K
D071	48T68828F11	1SS133
○ D321	48T63463F01	CP., DAP202K
● D321	48T63463F01	CP., DAP202K
○ D322	48T63463F01	CP., DAP202K
● D322	48T63463F01	CP., DAP202K
○ D323	48T63463F01	CP., DAP202K
● D323	48T63463F01	CP., DAP202K
○ D361	48T85270W02	MPG06G
△ D361	48T85270W02	MPG06G
□ D361	48T85270W02	MPG06G
○ D362	48T85270W02	MPG06G
△ D362	48T85270W02	MPG06G
□ D362	48T85270W02	MPG06G
○ D363	48T85270W02	MPG06G
△ D363	48T85270W02	MPG06G
□ D363	48T85270W02	MPG06G
○ D364	48T85270W02	MPG06G
△ D364	48T85270W02	MPG06G
□ D364	48T85270W02	MPG06G
○ D365	48T85270W02	MPG06G
△ D365	48T85270W02	MPG06G
□ D365	48T85270W02	MPG06G
○ D366	48T85270W02	MPG06G
△ D366	48T85270W02	MPG06G
□ D366	48T85270W02	MPG06G
○ D367	48T85270W02	MPG06G
△ D367	48T85270W02	MPG06G
□ D367	48T85270W02	MPG06G
○ D368	48T85270W02	MPG06G
△ D368	48T85270W02	MPG06G
□ D368	48T85270W02	MPG06G
D501	48T68828F11	1SS133
D502	48T85270W02	MPG06G
D503	48T68580F03	DSA3A4
○ D505	48T25651W02	CP., MA152WK
● D505	48T25651W02	CP., MA152WK
D821	48T68828F11	1SS133
D831	48T63462F01	CP., DAN202K
D832	48T63462F01	CP., DAN202K
D851	48T63463F01	CP., DAP202K
D852	48T63462F01	CP., DAN202K
D853	48T68828F11	1SS133

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
D872	48T68828F11	1SS133
D881	48T85270W02	MPG06G
D882	48T64134F01	CP., DA204K
ZD091	48T25766W24	Zener, HZS9C1L
ZD092	48T25766W01	Zener, HZS6A1L
ZD502	48T25766W23	Zener, HZS9B3L
ZD802	48T25766W13	Zener, HZS7B1L
ZD833	48T25766W22	Zener, HZS9B2L
ZD871	48T25766W04	Zener, HZS6B1L
□ ZD881	48T25766W26	Zener, HZS9C3L
○ ZD882	48T25766W25	Zener, HZS9C2L
● ZD882	48T25766W25	Zener, HZS9C2L
△ ZD882	48T25766W25	Zener, HZS9C2L
DSP001	48T81048F02	Surge Protector, DSP-201M

Coils

Symbol No.	Part No.	Description
L071	24T25798W13	Inductor, 1mH
L501	24T75055W06	Choke
L502	24T65110W16	CP., 1µH
L503	24T65110W16	CP., 1µH

Crystals

Symbol No.	Part No.	Description
X041	91T85169W43	7.2MHz
X061	91T45118W18	4.332MHz
X501	91T85169W49	8.3886MHz
X502	91T85169W27	4.9152MHz

Filter / Buzzer

Symbol No.	Part No.	Description
BPF001	91T75257W01	Filter, LPF11830K
○ BZ801	50T25148W02	CB13PA-225
● BZ801	50T25148W02	CB13PA-225
△ BZ801	50T25148W02	CB13PA-225

Switches

Symbol No.	Part No.	Description
S501	40T45282W01	Slide, SLD-42-508 (Ai-NET • NORM/(EQ/DIV))
S821	40T75104W01	Tact,SKHLLB (RESET)

Capacitors

Symbol No.	Part No.	Description
C001	08S65128F69	CP., 0.01µF
E002	23S75372W05	ELY., 22µF / 16V
C003	08S65128F35	CP., 100pF
E003	23S75372W14	ELY., 0.68µF / 50V
C004	08T15399W01	CP., 0.022µF
C005	08T15399W03	CP., 0.047µF
C006	08T15399W01	CP., 0.022µF
C007	08T15807W05	CP., 0.1µF
C008	08T15399W01	CP., 0.022µF
C009	08T15399W01	CP., 0.022µF
C010	08S65128F35	CP., 100pF
C021	08S65128F69	CP., 0.01µF
E021	23S75373W06	ELY., 100µF / 16V
○ C022	08T55390W29	TF, 0.1µF
● C022	08T35122W13	PF., 0.1µF
△ C022	08T35122W13	PF., 0.1µF
□ C022	08T35122W13	PF., 0.1µF
E022	23S75372W02	ELY., 100µF / 10V
C023	08S65128F69	CP., 0.01µF
E023	23S75372W10	ELY., 0.1µF / 50V
C024	08T15399W02	CP., 0.033µF
E024	23S75372W04	ELY., 10µF / 16V
○ C025	08T55390W31	TF, 0.15µF
● C025	08T35122W15	PF., 0.15µF
△ C025	08T35122W15	PF., 0.15µF
□ C025	08T35122W15	PF., 0.15µF
E025	23S75372W14	ELY., 0.68µF / 50V
C026	23S82372F19	ELY., (B.P) 2.2µF / 50V
C027	08T15399W02	CP., 0.033µF
C028	08S65128F69	CP., 0.01µF
C029	08S65128F69	CP., 0.01µF
C030	08T15399W01	CP., 0.022µF
C041	08S82122F31	CP., 56pF
E041	23S75372W05	ELY., 22µF / 16V
C042	08T15399W01	CP., 0.022µF
C043	08S82122F19	CP., 18pF
C044	08S82122F19	CP., 18pF
○ C051	08S35374W01	CP., 0.1µF
● C051	08S35374W01	CP., 0.1µF
△ C051	08S35374W01	CP., 0.1µF
○ E051	23S75372W06	ELY., 33µF / 16V
● E051	23S75372W06	ELY., 33µF / 16V
△ E051	23S75372W06	ELY., 33µF / 16V
○ C052	08S82122F33	CP., 68pF
● C052	08S82122F33	CP., 68pF
△ C052	08S82122F33	CP., 68pF
○ E052	23S75372W10	ELY., 0.1µF / 50V
● E052	23S75372W10	ELY., 0.1µF / 50V
△ E052	23S75372W10	ELY., 0.1µF / 50V
○ E053	23S75372W15	ELY., 1µF / 50V
● E053	23S75372W15	ELY., 1µF / 50V

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.		Part No.	Description	
△	E053	23S75372W15	ELY.,	1μF / 50V
○	E054	23S75372W04	ELY.,	10μF / 16V
●	E054	23S75372W04	ELY.,	10μF / 16V
△	E054	23S75372W04	ELY.,	10μF / 16V
	C061	08S82122F23	CP.,	27pF
	E061	23S75372W04	ELY.,	10μF / 16V
	C062	08S82122F23	CP.,	27pF
	E062	23S75372W16	ELY.,	2.2μF / 50V
	C063	08S82122F49	CP.,	330pF
	E063	23S75372W04	ELY.,	10μF / 16V
	C064	08S65128F53	CP.,	560pF
	C071	08S65128F69	CP.,	0.01μF
	E071	23S75372W10	ELY.,	0.1μF / 50V
	C072	08S65128F56	CP.,	820pF
	C073	08T15399W01	CP.,	0.022μF
	C074	08S65128F35	CP.,	100pF
	C075	08S65128F69	CP.,	0.01μF
	C076	08S65128F61	CP.,	2200pF
	C077	08S65128F69	CP.,	0.01μF
	C078	08S65128F81	CP.,	0.039μF
	C091	08T15399W01	CP.,	0.022μF
	E091	23S75372W03	ELY.,	220μF / 10V
	C092	08T15399W01	CP.,	0.022μF
	E092	23S75372W04	ELY.,	10μF / 16V
○	C201	08T55390W27	TF,	0.068μF
●	C201	08T35122W11	PF.,	0.068μF
△	C201	08T35122W11	PF.,	0.068μF
	E201	23S75372W15	ELY.,	1μF / 50V
○	C202	08T55390W27	TF,	0.068μF
●	C202	08T35122W11	PF.,	0.068μF
△	C202	08T35122W11	PF.,	0.068μF
	E202	23S75372W15	ELY.,	1μF / 50V
	E203	23S75372W04	ELY.,	10μF / 16V
	E204	23S75372W09	ELY.,	4.7μF / 35V
○	E205	23S75372W10	ELY.,	0.1μF / 50V
●	E205	23S75372W10	ELY.,	0.1μF / 50V
△	E205	23S75372W10	ELY.,	0.1μF / 50V
□	E205	23S75372W14	ELY.,	0.68μF / 50V
○	E206	23S75372W10	ELY.,	0.1μF / 50V
●	E206	23S75372W10	ELY.,	0.1μF / 50V
△	E206	23S75372W10	ELY.,	0.1μF / 50V
□	E206	23S75372W14	ELY.,	0.68μF / 50V
○	E207	23S75372W04	ELY.,	10μF / 16V
●	E207	23S75372W04	ELY.,	10μF / 16V
△	E207	23S75372W04	ELY.,	10μF / 16V
□	E207	23S75372W05	ELY.,	22μF / 16V
○	C221	08T55390W23	TF,	0.033μF

Symbol No.		Part No.	Description	
●	C221	08T35122W07	PF.,	0.033μF
△	C221	08T35122W07	PF.,	0.033μF
	E221	23S75372W15	ELY.,	1μF / 50V
○	C222	08T55390W23	TF,	0.033μF
●	C222	08T35122W07	PF.,	0.033μF
△	C222	08T35122W07	PF.,	0.033μF
	E222	23S75372W15	ELY.,	1μF / 50V
○	C223	08T55390W14	PF.,	5600pF
●	C223	08T55390W14	PF.,	5600pF
△	C223	08T55390W14	PF.,	5600pF
	E223	23S75372W09	ELY.,	4.7μF / 35V
○	C224	08T55390W14	PF.,	5600pF
●	C224	08T55390W14	PF.,	5600pF
△	C224	08T55390W14	PF.,	5600pF
	E224	23S75372W09	ELY.,	4.7μF / 35V
□	C225	08T15399W02	CP.,	0.033μF
□	C226	08T15399W02	CP.,	0.033μF
□	C227	08S65128F66	CP.,	5600pF
	E227	23S75372W15	ELY.,	1μF / 50V
□	C228	08S65128F66	CP.,	5600pF
	E228	23S75372W02	ELY.,	100μF / 10V
	C229	08S65128F69	CP.,	0.01μF
	E229	23S75372W15	ELY.,	1μF / 50V
	E230	23S75372W15	ELY.,	1μF / 50V
	E231	23S75372W15	ELY.,	1μF / 50V
	E232	23S75372W07	ELY.,	47μF / 16V
○	E243	23S75372W15	ELY.,	1μF / 50V
●	E243	23S75372W15	ELY.,	1μF / 50V
○	E244	23S75372W15	ELY.,	1μF / 50V
●	E244	23S75372W15	ELY.,	1μF / 50V
○	E245	23S75372W09	ELY.,	4.7μF / 35V
●	E245	23S75372W09	ELY.,	4.7μF / 35V
○	E246	23S75372W09	ELY.,	4.7μF / 35V
●	E246	23S75372W09	ELY.,	4.7μF / 35V
○	E247	23S75372W15	ELY.,	1μF / 50V
●	E247	23S75372W15	ELY.,	1μF / 50V
○	E261	23S75372W05	ELY.,	22μF / 16V
●	E261	23S75372W05	ELY.,	22μF / 16V
○	C262	08S65128F56	CP.,	820pF
●	C262	08S65128F56	CP.,	820pF
○	E262	23S75372W05	ELY.,	22μF / 16V
●	E262	23S75372W05	ELY.,	22μF / 16V
○	E263	23S75372W08	ELY.,	100μF / 16V
●	E263	23S75372W08	ELY.,	100μF / 16V
○	E264	23S75372W08	ELY.,	100μF / 16V
●	E264	23S75372W08	ELY.,	100μF / 16V
○	C265	08S65128F56	CP.,	820pF

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
● C265	08S65128F56	CP., 820pF
○ E265	23S75372W07	ELY., 47µF / 16V
● E265	23S75372W07	ELY., 47µF / 16V
○ E266	23S75372W04	ELY., 10µF / 16V
● E266	23S75372W04	ELY., 10µF / 16V
○ E271	23S75372W05	ELY., 22µF / 16V
● E271	23S75372W05	ELY., 22µF / 16V
○ C272	08S65128F56	CP., 820pF
● C272	08S65128F56	CP., 820pF
○ E272	23S75372W05	ELY., 22µF / 16V
● E272	23S75372W05	ELY., 22µF / 16V
○ E273	23S75372W08	ELY., 100µF / 16V
● E273	23S75372W08	ELY., 100µF / 16V
○ E274	23S75372W08	ELY., 100µF / 16V
● E274	23S75372W08	ELY., 100µF / 16V
○ C275	08S65128F56	CP., 820pF
● C275	08S65128F56	CP., 820pF
○ E275	23S75372W05	ELY., 22µF / 16V
● E275	23S75372W05	ELY., 22µF / 16V
○ E276	23S75372W04	ELY., 10µF / 16V
● E276	23S75372W04	ELY., 10µF / 16V
○ E277	23S75372W05	ELY., 22µF / 16V
● E277	23S75372W05	ELY., 22µF / 16V
○ C278	08S65128F56	CP., 820pF
● C278	08S65128F56	CP., 820pF
○ E278	23S75372W05	ELY., 22µF / 16V
● E278	23S75372W05	ELY., 22µF / 16V
○ E279	23S75372W08	ELY., 100µF / 16V
● E279	23S75372W08	ELY., 100µF / 16V
○ E280	23S75372W08	ELY., 100µF / 16V
● E280	23S75372W08	ELY., 100µF / 16V
○ C281	08S65128F56	CP., 820pF
● C281	08S65128F56	CP., 820pF
○ E281	23S75372W05	ELY., 22µF / 16V
● E281	23S75372W05	ELY., 22µF / 16V
○ E282	23S75372W04	ELY., 10µF / 16V
● E282	23S75372W04	ELY., 10µF / 16V
○ E283	23S75372W05	ELY., 22µF / 16V
● E283	23S75372W05	ELY., 22µF / 16V
○ E284	23S75372W05	ELY., 22µF / 16V
● E284	23S75372W05	ELY., 22µF / 16V
E301	23S75372W04	ELY., 10µF / 16V
E302	23S75372W04	ELY., 10µF / 16V
E303	23S75372W04	ELY., 10µF / 16V
E304	23S75372W04	ELY., 10µF / 16V
E305	23S75372W04	ELY., 10µF / 16V
○ E321	23S75372W04	ELY., 10µF / 16V

Symbol No.	Part No.	Description
△ E321	23S75372W04	ELY., 10µF / 16V
□ E321	23S75372W04	ELY., 10µF / 16V
○ E322	23S75372W04	ELY., 10µF / 16V
○ E323	23S75372W04	ELY., 10µF / 16V
● E323	23S75372W04	ELY., 10µF / 16V
○ E324	23S75372W04	ELY., 10µF / 16V
● E324	23S75372W04	ELY., 10µF / 16V
○ E325	23S75372W04	ELY., 10µF / 16V
● E325	23S75372W04	ELY., 10µF / 16V
△ E325	23S75372W04	ELY., 10µF / 16V
○ E326	23S75372W04	ELY., 10µF / 16V
● E326	23S75372W04	ELY., 10µF / 16V
△ E326	23S75372W04	ELY., 10µF / 16V
E327	23S75372W04	ELY., 10µF / 16V
E328	23S75372W04	ELY., 10µF / 16V
○ C361	08T15807W05	CP., 0.1µF
△ C361	08T15807W05	CP., 0.1µF
□ C361	08T15807W05	CP., 0.1µF
○ E365	23T75478W35	ELY., 0.33µF / 50V
△ E365	23T75478W35	ELY., 0.33µF / 50V
□ E365	23T75478W35	ELY., 0.33µF / 50V
○ E366	23T75478W35	ELY., 0.33µF / 50V
△ E366	23T75478W35	ELY., 0.33µF / 50V
□ E366	23T75478W35	ELY., 0.33µF / 50V
○ E367	23T75478W35	ELY., 0.33µF / 50V
△ E367	23T75478W35	ELY., 0.33µF / 50V
□ E367	23T75478W35	ELY., 0.33µF / 50V
○ E368	23T75478W35	ELY., 0.33µF / 50V
△ E368	23T75478W35	ELY., 0.33µF / 50V
□ E368	23T75478W35	ELY., 0.33µF / 50V
○ E369	23T75478W37	ELY., 1µF / 50V
△ E369	23T75478W37	ELY., 1µF / 50V
□ E369	23T75478W37	ELY., 1µF / 50V
○ E370	23T75478W18	ELY., 47µF / 16V
△ E370	23T75478W18	ELY., 47µF / 16V
□ E370	23T75478W18	ELY., 47µF / 16V
○ E371	23T75478W37	ELY., 1µF / 50V
△ E371	23T75478W37	ELY., 1µF / 50V
□ E371	23T75478W37	ELY., 1µF / 50V
C501	08S65128F69	CP., 0.01µF
E501	23S75372W03	ELY., 220µF / 10V
C502	08S82122F21	CP., 22pF
E502	23S75372W02	ELY., 100µF / 10V
C503	08S82122F21	CP., 22pF
○ E503	23S75372W04	ELY., 10µF / 16V
● E503	23S75372W15	ELY., 1µF / 50V
△ E503	23S75372W09	ELY., 4.7µF / 35V

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
□ E503	23S75372W16	ELY., 2.2µF / 50V
C504	08T15399W01	CP., 0.022µF
E504	23T00149L27	ELY., 330µF / 16V
E505	23T00149L26	ELY., 220µF / 16V
● E506	23S75373W06	ELY., 100µF / 16V
C507	08S82122F23	CP., 27pF
○ E507	23T75346W02	ELY., 4700µF / 16V
● E507	23T75346W01	ELY., 2200µF / 16V
△ E507	23T75346W02	ELY., 4700µF / 16V
□ E507	23T75346W02	ELY., 4700µF / 16V
C508	08S82122F22	CP., 24pF
E508	23S75372W15	ELY., 1µF / 50V
C509	08T15399W01	CP., 0.022µF
E509	23S75372W15	ELY., 1µF / 50V
E510	23S75372W04	ELY., 10µF / 16V
C511	08S65128F35	CP., 100pF
E511	23S75372W15	ELY., 1µF / 50V
C513	08S65128F35	CP., 100pF
C514	08S65128F35	CP., 100pF
C515	08S65128F35	CP., 100pF
C517	08S65128F35	CP., 100pF
C521	08S65128F35	CP., 100pF
C522	08S65128F35	CP., 100pF
○ C523	08S65128F69	CP., 0.01µF
● C523	08S65128F69	CP., 0.01µF
C526	08T15399W01	CP., 0.022µF
C527	08T15399W01	CP., 0.022µF
○ C529	08S65128F35	CP., 100pF
△ C529	08S65128F35	CP., 100pF
□ C529	08S65128F35	CP., 100pF
C530	08S65128F69	CP., 0.01µF
C532	08S65128F35	CP., 100pF
C801	08S65128F35	CP., 100pF
E821	23S75372W04	ELY., 10µF / 16V
C831	08S53332F23	CP., 100pF
C832	08T15807W05	CP., 0.1µF
○ E832	23S75372W04	ELY., 10µF / 16V
△ E832	23S75372W04	ELY., 10µF / 16V
□ E832	23S75372W04	ELY., 10µF / 16V
E841	23S75372W02	ELY., 100µF / 10V
E843	23S75372W09	ELY., 4.7µF / 35V
C851	08S82122F37	CP., 100pF
E851	23S75372W04	ELY., 10µF / 16V
C852	08S82122F23	CP., 27pF
C871	08S65128F69	CP., 0.01µF
E871	23S75372W15	ELY., 1µF / 50V
E872	23S75372W10	ELY., 0.1µF / 50V

Symbol No.	Part No.	Description
○ C881	08S65128F69	CP., 0.01µF
● C881	08S65128F69	CP., 0.01µF
△ C881	08S65128F69	CP., 0.01µF
E881	23S75372W04	ELY., 10µF / 16V
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)
R001	06S64995F53	1K ohm
R002	06S64995F77	10K ohm
R004	06S64995F77	10K ohm
R005	06S64995F77	10K ohm
R006	06S64995F81	15K ohm
R007	06S64995F61	2.2K ohm
R008	06S64995F53	1K ohm
R009	06S64995F61	2.2K ohm
R014	06S64995F77	10K ohm
R021	06S64995F53	1K ohm
R022	06S64995F53	1K ohm
R023	06S64995F61	2.2K ohm
R024	06S64995F61	2.2K ohm
R025	06S64995F29	100 ohm
R026	06S64995F83	18K ohm
R027	06S64995F85	22K ohm
R028	06S64995F53	1K ohm
R029	06S64995F71	5.6K ohm
R030	06S70072F29	100 ohm 1/4W
R031	06S64995F77	10K ohm
R032	06S64995F61	2.2K ohm
R033	06S64995F53	1K ohm
R034	06S64995F53	1K ohm
R041	06S64995F53	1K ohm
R042	06S64995F93	47K ohm
R043	06S64995F53	1K ohm
R044	06S64995F93	47K ohm
○ R051	06S64995F89	33K ohm
● R051	06S64995F89	33K ohm
△ R051	06S64995F89	33K ohm
○ R052	06S64995F89	33K ohm
● R052	06S64995F89	33K ohm
△ R052	06S64995F89	33K ohm
○ R053	06S64996F26	1M ohm
● R053	06S64996F26	1M ohm
△ R053	06S64996F26	1M ohm
○ R054	06S64996F01	91K ohm
● R054	06S64996F01	91K ohm
△ R054	06S64996F01	91K ohm

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
R061	06S64995F61	2.2K ohm
R062	06S64995F69	4.7K ohm
R063	06S64995F77	10K ohm
R064	06S64995F53	1K ohm
R065	06S64995F53	1K ohm
R071	06S64996F02	100K ohm
R072	06S64995F77	10K ohm
R073	06S64995F81	15K ohm
R074	06S64996F10	220K ohm
R075	06S64996F14	330K ohm
R076	06S64995F29	100 ohm
R077	06S64995F77	10K ohm
R078	06S64996F04	120K ohm
R079	06S64995F13	22 ohm
R080	06S64996F02	100K ohm
R081	06S64996F02	100K ohm
R091	06S64995F65	3.3K ohm
R092	06S64995F53	1K ohm
R093	06S70072F61	2.2K ohm 1/4W
R094	06S64995F77	10K ohm
R095	06S70072F41	330 ohm 1/4W
R096	06S53330F73	6.8K ohm 1/8W
R201	06S64996F30	2.2M ohm
R202	06S64996F30	2.2M ohm
R203	06S64995F62	2.4K ohm
R204	06S64995F62	2.4K ohm
R205	06S64995F59	1.8K ohm
R206	06S64995F59	1.8K ohm
○ R207	06S64995F84	20K ohm
● R207	06S64995F84	20K ohm
△ R207	06S64995F84	20K ohm
□ R207	06S64995F92	43K ohm
○ R208	06S64995F79	12K ohm
● R208	06S64995F79	12K ohm
△ R208	06S64995F79	12K ohm
○ R209	06S64995F37	220 ohm
● R209	06S64995F37	220 ohm
△ R209	06S64995F37	220 ohm
○ R210	06S64995F75	8.2K ohm
● R210	06S64995F75	8.2K ohm
△ R210	06S64995F75	8.2K ohm
□ R211	06S64995F69	4.7K ohm
R221	06S64995F77	10K ohm
R222	06S64995F77	10K ohm
R223	06S64995F77	10K ohm
R224	06S64995F77	10K ohm
○ R243	06S64996F02	100K ohm

Symbol No.	Part No.	Description
● R243	06S64996F02	100K ohm
○ R244	06S64996F02	100K ohm
● R244	06S64996F02	100K ohm
○ R247	06S64995F65	3.3K ohm
● R247	06S64995F65	3.3K ohm
○ R248	06S64995F65	3.3K ohm
● R248	06S64995F65	3.3K ohm
○ R261	06S64995F90	36K ohm
● R261	06S64995F90	36K ohm
○ R262	06S64995F90	36K ohm
● R262	06S64995F90	36K ohm
○ R263	06S64995F90	36K ohm
● R263	06S64995F90	36K ohm
○ R264	06S64995F90	36K ohm
● R264	06S64995F90	36K ohm
○ R271	06S64995F90	36K ohm
● R271	06S64995F90	36K ohm
○ R272	06S64995F90	36K ohm
● R272	06S64995F90	36K ohm
○ R273	06S64995F90	36K ohm
● R273	06S64995F90	36K ohm
○ R274	06S64995F90	36K ohm
● R274	06S64995F90	36K ohm
○ R276	06S64995F90	36K ohm
● R276	06S64995F90	36K ohm
○ R277	06S64995F90	36K ohm
● R277	06S64995F90	36K ohm
○ R278	06S64995F90	36K ohm
● R278	06S64995F90	36K ohm
○ R279	06S64995F90	36K ohm
● R279	06S64995F90	36K ohm
R291	06S64995F61	2.2K ohm
R292	06S64995F61	2.2K ohm
R301	06T15443W85	22K ohm
R302	06T15443W85	22K ohm
R303	06T15443W85	22K ohm
R304	06T15443W85	22K ohm
R305	06T15443W79	12K ohm
R306	06T15443W79	12K ohm
R307	06T15443W79	12K ohm
R308	06T15443W79	12K ohm
○ R321	06S64995F77	10K ohm
○ R322	06S64995F77	10K ohm
○ R323	06S64995F77	10K ohm
○ R324	06S64995F77	10K ohm
○ R325	06S64995F77	10K ohm
○ R326	06S64995F77	10K ohm

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
○ R327	06S64995F77	10K ohm
○ R328	06S64995F77	10K ohm
○ R329	06S64995F37	220 ohm
● R329	06S64995F37	220 ohm
○ R330	06S64995F37	220 ohm
● R330	06S64995F37	220 ohm
○ R331	06S64995F65	3.3K ohm
● R331	06S64995F71	5.6K ohm
○ R332	06S64995F65	3.3K ohm
● R332	06S64995F71	5.6K ohm
○ R333	06S64995F29	100 ohm
● R333	06S64995F29	100 ohm
○ R334	06S64995F29	100 ohm
● R334	06S64995F29	100 ohm
○ R335	06S64995F85	22K ohm
● R335	06S64995F89	33K ohm
○ R336	06S64995F85	22K ohm
● R336	06S64995F89	33K ohm
○ R337	06S64995F37	220 ohm
● R337	06S64995F37	220 ohm
△ R337	06S64995F37	220 ohm
○ R338	06S64995F37	220 ohm
● R338	06S64995F37	220 ohm
△ R338	06S64995F37	220 ohm
○ R339	06S64995F65	3.3K ohm
● R339	06S64995F71	5.6K ohm
○ R340	06S64995F65	3.3K ohm
● R340	06S64995F71	5.6K ohm
○ R341	06S64995F29	100 ohm
● R341	06S64995F29	100 ohm
△ R341	06S64995F29	100 ohm
○ R342	06S64995F29	100 ohm
● R342	06S64995F29	100 ohm
△ R342	06S64995F29	100 ohm
○ R343	06S64995F85	22K ohm
● R343	06S64995F89	33K ohm
△ R343	06S64995F85	22K ohm
○ R344	06S64995F85	22K ohm
● R344	06S64995F89	33K ohm
△ R344	06S64995F85	22K ohm
○ R345	06S64995F37	220 ohm
● R345	06S64995F37	220 ohm
△ R345	06S64995F37	220 ohm
○ R346	06S64995F37	220 ohm
● R346	06S64995F37	220 ohm
△ R346	06S64995F37	220 ohm
○ R347	06S64995F65	3.3K ohm

Symbol No.	Part No.	Description
● R347	06S64995F65	3.3K ohm
○ R348	06S64995F65	3.3K ohm
● R348	06S64995F65	3.3K ohm
R349	06S64995F29	100 ohm
R350	06S64995F29	100 ohm
○ R351	06S64995F85	22K ohm
● R351	06S64995F89	33K ohm
△ R351	06S64995F85	22K ohm
□ R351	06S64995F85	22K ohm
○ R352	06S64995F85	22K ohm
● R352	06S64995F89	33K ohm
△ R352	06S64995F85	22K ohm
□ R352	06S64995F85	22K ohm
△ R353	06S64995F53	1K ohm
△ R354	06S64995F53	1K ohm
△ R355	06S64995F53	1K ohm
□ R355	06S64995F61	2.2K ohm
△ R356	06S64995F53	1K ohm
□ R356	06S64995F61	2.2K ohm
○ R373	06S64995F77	10K ohm
△ R373	06S64995F77	10K ohm
□ R373	06S64995F77	10K ohm
R501	06S64995F85	22K ohm
R502	06S64995F77	10K ohm
R503	06S64995F53	1K ohm
R504	06S64995F53	1K ohm
R505	06S64995F53	1K ohm
R506	06S64995F53	1K ohm
R507	06S64995F53	1K ohm
R508	06S64995F53	1K ohm
R509	06S64995F53	1K ohm
R510	06S64995F53	1K ohm
R511	06S64995F77	10K ohm
R512	06S64995F61	2.2K ohm
R513	06S64995F53	1K ohm
R514	06S64995F85	22K ohm
R515	06S64995F61	2.2K ohm
R516	06S64995F61	2.2K ohm
R517	06S64995F85	22K ohm
R518	06S64995F85	22K ohm
R519	06S64995F53	1K ohm
R520	06S64995F53	1K ohm
R521	06S64995F93	47K ohm
○ R523	06S64995F78	11K ohm
● R523	06S64995F77	10K ohm
△ R523	06S64995F85	22K ohm
□ R523	06S64995F88	30K ohm

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

	Symbol No.	Part No.	Description
○	R524	06S64995F87	27K ohm
△	R524	06S64995F81	15K ohm
□	R524	06S64995F69	4.7K ohm
	R525	06S64995F85	22K ohm
	R526	06S64995F85	22K ohm
	R528	06S64995F93	47K ohm
	R530	06S64995F53	1K ohm
	R532	06S64995F93	47K ohm
	R533	06S64995F93	47K ohm
	R534	06S64995F93	47K ohm
	R535	06S64996F02	100K ohm
	R538	06S64996F10	220K ohm
	R539	06S64995F53	1K ohm
	R540	06S64995F93	47K ohm
	R541	06S64995F53	1K ohm
	R543	06S64995F93	47K ohm
	R544	06S64995F93	47K ohm
	R545	06S64995F93	47K ohm
	R546	06S64995F53	1K ohm
	R547	06S64995F53	1K ohm
	R548	06S64995F53	1K ohm
	R550	06S64995F79	12K ohm
○	R551	06S64995F53	1K ohm
●	R551	06S64995F53	1K ohm
○	R552	06S64995F93	47K ohm
●	R552	06S64995F93	47K ohm
△	R552	06S64995F77	10K ohm
□	R552	06S64995F77	10K ohm
	R556	06S70072F77	10K ohm 1/4W
	R557	06S70072F59	1.8K ohm 1/4W
	R558	06S70072F59	1.8K ohm 1/4W
	R559	06S70072F59	1.8K ohm 1/4W
	R560	06S70072F59	1.8K ohm 1/4W
	R561	06S64996F02	100K ohm
	R562	06S70072F53	1K ohm 1/4W
	R564	06S70072F39	270 ohm 1/4W
	R565	06S70072F39	270 ohm 1/4W
	R566	06S64995F93	47K ohm
○	R567	06S64995F77	10K ohm
●	R567	06S64995F77	10K ohm
●	R568	06S53330F77	10K ohm 1/8W
●	R569	06S70072F61	2.2K ohm 1/4W
	R570	06S64996F02	100K ohm
□	R573	06S64995F37	220 ohm
□	R574	06S64995F37	220 ohm
	R575	06S64995F53	1K ohm
	R576	06S64995F53	1K ohm

	Symbol No.	Part No.	Description
	R577	06S64995F53	1K ohm
	R578	06S64995F53	1K ohm
	R579	06S64995F53	1K ohm
	R580	06S64995F53	1K ohm
	R581	06S64995F94	51K ohm
	R582	06S64995F94	51K ohm
	R583	06S64995F53	1K ohm
	R584	06S64995F53	1K ohm
	R585	06S64995F53	1K ohm
	R587	06S64996F02	100K ohm
	R588	06S64995F53	1K ohm
	R589	06S64995F53	1K ohm
	R590	06S64995F53	1K ohm
	R591	06S64995F53	1K ohm
	R592	06S64995F53	1K ohm
	R593	06S64995F53	1K ohm
	R594	06S64995F53	1K ohm
	R595	06S64995F77	10K ohm
○	R596	06S64995F85	22K ohm
●	R596	06S64995F85	22K ohm
○	R597	06S64995F85	22K ohm
●	R597	06S64995F85	22K ohm
○	R598	06S64995F67	3.9K ohm
●	R598	06S64995F67	3.9K ohm
○	R599	06S64995F67	3.9K ohm
●	R599	06S64995F67	3.9K ohm
□	R600	06S64995F61	2.2K ohm
	R802	06S64995F89	33K ohm
	R803	06S64995F89	33K ohm
	R804	06S64995F93	47K ohm
	R805	06S64995F93	47K ohm
	R806	06S64995F93	47K ohm
	R807	06S64995F93	47K ohm
	R808	06S64995F93	47K ohm
○	R811	06S64995F77	10K ohm
●	R811	06S64995F77	10K ohm
△	R811	06S64995F77	10K ohm
○	R812	06S64995F53	1K ohm
●	R812	06S64995F53	1K ohm
△	R812	06S64995F53	1K ohm
○	R813	06S64995F53	1K ohm
●	R813	06S64995F53	1K ohm
△	R813	06S64995F53	1K ohm
	R821	06S64995F85	22K ohm
	R822	06S64995F69	4.7K ohm
	R823	06S64995F61	2.2K ohm
	R831	06S64995F77	10K ohm

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
R834	06S70072F53	1K ohm 1/4W
R835	06S70072F77	10K ohm 1/4W
○ R837	06S64995F77	10K ohm
△ R837	06S64995F77	10K ohm
□ R837	06S64995F77	10K ohm
○ R838	06S64995F81	15K ohm
△ R838	06S64995F81	15K ohm
□ R838	06S64995F81	15K ohm
○ R839	06S64995F37	220 ohm
△ R839	06S64995F37	220 ohm
□ R839	06S64995F37	220 ohm
R851	06S64995F73	6.8K ohm
R852	06S64995F77	10K ohm
R853	06S64995F77	10K ohm
R854	06S64995F69	4.7K ohm
R855	06S64995F73	6.8K ohm
R856	06S64995F77	10K ohm
R857	06S64995F77	10K ohm
R858	06S70072F19	39 ohm 1/4W
R859	06S70072F19	39 ohm 1/4W
R860	06S70072F19	39 ohm 1/4W
R861	06S70072F19	39 ohm 1/4W
R862	06S64995F61	2.2K ohm
R863	06S64995F57	1.5K ohm
R864	06S64995F57	1.5K ohm
R865	06S64995F61	2.2K ohm
R866	06S64995F55	1.2K ohm
R867	06S70072F05	10 ohm 1/4W
R871	06S70072F67	3.9K ohm 1/4W
R872	06S53330F69	4.7K ohm 1/8W
R873	06S53330F69	4.7K ohm 1/8W
R881	06S53330F77	10K ohm 1/8W
R883	06S70072F59	1.8K ohm 1/4W
R884	06S64995F77	10K ohm
R888	06S70072F89	9.1 ohm 1/4W
R889	06S70072F89	9.1 ohm 1/4W
R890	06S70072F89	9.1 ohm 1/4W
R891	06S64995F77	10K ohm
R892	06S64995F77	10K ohm
R893	06S70072F61	2.2K ohm 1/4W
R894	06S64995F77	10K ohm
R895	06S70072F45	470 ohm 1/4W
○ R896	06S64995F55	1.2K ohm
● R896	06S64995F55	1.2K ohm
△ R896	06S64995F55	1.2K ohm
R897	06S70072F89	9.1 ohm 1/4W
R899	06S70072F59	1.8K ohm 1/4W

Symbol No.	Part No.	Description
VR201	18T15356W13	Variable, 10K ohm
VR202	18T15356W13	Variable, 10K ohm

Front P.C.Board

IC's

Symbol No.	Part No.	Description
IC401	51T85152W01	LC75883W
IC402	51T55639W01	RS-31

Transistors

Symbol No.	Part No.	Description
○ Q401	48T73888F12	CP., FMC2
● Q401	48T73888F12	CP., FMC2
△ Q401	48T73888F12	CP., FMC2
○ Q402	48T63788F04	CP., 2SD1328
● Q402	48T63788F04	CP., 2SD1328
△ Q402	48T63788F04	CP., 2SD1328
○ Q403	48T63788F04	CP., 2SD1328
● Q403	48T63788F04	CP., 2SD1328
△ Q403	48T63788F04	CP., 2SD1328
○ Q404	48T63788F04	CP., 2SD1328
● Q404	48T63788F04	CP., 2SD1328
△ Q404	48T63788F04	CP., 2SD1328
○ Q405	48T63788F04	CP., 2SD1328
● Q405	48T63788F04	CP., 2SD1328
△ Q405	48T63788F04	CP., 2SD1328
○ Q406	48T63788F04	CP., 2SD1328
● Q406	48T63788F04	CP., 2SD1328
△ Q406	48T63788F04	CP., 2SD1328
○ Q407	48T63788F04	CP., 2SD1328
● Q407	48T63788F04	CP., 2SD1328
△ Q407	48T63788F04	CP., 2SD1328
Q408	48T62967F03	CP., DTC124K
Q409	48T62967F03	CP., DTC124K

Diodes

Symbol No.	Part No.	Description
D401	48T64134F01	CP., DA204K
D402	48T64134F01	CP., DA204K
D403	48T64134F01	CP., DA204K
D404	48T64134F01	CP., DA204K
D405	48T64134F01	CP., DA204K
D406	48T81063F01	CP., MA159

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

	Symbol No.	Part No.	Description
	D407	48T81063F01	CP., MA159
	D408	48T63462F01	CP., DAN202K
○	D409	48T64134F01	CP., DA204K
●	D409	48T64134F01	CP., DA204K
△	D409	48T64134F01	CP., DA204K
	ZD401	48T84735F07	Zener, MA3056

LED's

	Symbol No.	Part No.	Description
	LD401	48T65477W05	CP., SLM-010DTT87 (ORG)
○	LD402	48T65477W05	CP., SLM-010DTT87 (ORG)
●	LD402	48T65477W05	CP., SLM-010DTT87 (ORG)
△	LD402	48T65477W05	CP., SLM-010DTT87 (ORG)
○	LD403	48T65477W05	CP., SLM-010DTT87 (ORG)
●	LD403	48T65477W05	CP., SLM-010DTT87 (ORG)
△	LD403	48T65477W05	CP., SLM-010DTT87 (ORG)
	LD404	48T65477W02	CP., SLM-010LTT87 (RED)
	LD405	48T65477W02	CP., SLM-010LTT87 (RED)
○	LD406	48T65477W05	CP., SLM-010DTT87 (ORG)
●	LD406	48T65477W05	CP., SLM-010DTT87 (ORG)
△	LD406	48T65477W05	CP., SLM-010DTT87 (ORG)
○	LD407	48T65477W05	CP., SLM-010DTT87 (ORG)
●	LD407	48T65477W05	CP., SLM-010DTT87 (ORG)
△	LD407	48T65477W05	CP., SLM-010DTT87 (ORG)
○	LD408	48T65477W05	CP., SLM-010DTT87 (ORG)
●	LD408	48T65477W05	CP., SLM-010DTT87 (ORG)
△	LD408	48T65477W05	CP., SLM-010DTT87 (ORG)

Switches

	Symbol No.	Part No.	Description
	S401	40T55656W03	Tact, CP. SKQMAJ (INTLZ/PWR)
	S403	40T75234W01	Tact, CP. SKQNAC (SOURCE/A.S.U.)
	S404	40T75234W01	Tact, CP. SKQNAC (EJECT)
	S405	40T55656W03	Tact, CP. SKQMAJ (REW/DN)
	S406	40T55656W03	Tact, CP. SKQMAJ (FF/UP)
	S407	40T75234W01	Tact, CP. SKQNAC (TUNE/A.MEMO)
	S408	40T55656W03	Tact, CP. SKQMAJ (BAND/PROG)
	S409	40T75234W01	Tact, CP. SKQNAC (TITLE)
	S410	40T75234W01	Tact, CP. SKQNAC (T.INFO)
○	S411	40T55656W03	Tact, CP. SKQMAJ (RDS/1/DOLBY • B/C)
●	S411	40T55656W03	Tact, CP. SKQMAJ (RDS/1/DOLBY • B/C)
△	S411	40T55656W03	Tact, CP. SKQMAJ (RDS/1/DOLBY • B/C)

	Symbol No.	Part No.	Description
□	S411	40T55656W03	Tact, CP. SKQMAJ (RDS/1/DOLBY)
	S412	40T55656W03	Tact, CP. SKQMAJ (PTY/2/P.S. DN)
	S413	40T55656W03	Tact, CP. SKQMAJ (P.PTY/3/P.S. UP)
	S414	40T55656W03	Tact, CP. SKQMAJ (M.I.X./4/B.SKIP)
	S415	40T55656W03	Tact, CP. SKQMAJ (RPT/5)
	S416	40T55656W03	Tact, CP. SKQMAJ (SCAN/6)
	S417	40T55656W03	Tact, CP. SKQMAJ (F/DEMO)

Lamps

	Symbol No.	Part No.	Description
○	PL401	65T75522W02	CP., 9V-85mA
●	PL401	65T75522W02	CP., 9V-85mA
△	PL401	65T75522W02	CP., 9V-85mA
○	PL402	65T75522W02	CP., 9V-85mA
●	PL402	65T75522W02	CP., 9V-85mA
△	PL402	65T75522W02	CP., 9V-85mA
○	PL403	65T75231W06	9V-85mA
●	PL403	65T75231W06	9V-85mA
△	PL403	65T75231W06	9V-85mA
□	PL403	65T75231W01	9V-85mA
○	PL404	65T75231W06	9V-85mA
●	PL404	65T75231W06	9V-85mA
△	PL404	65T75231W06	9V-85mA
□	PL404	65T75231W01	9V-85mA
	PL411	65T75233W01	CP., 6V-80mA
	PL412	65T75233W01	CP., 6V-80mA
○	PL413	65T75233W02	CP., 6V-80mA
●	PL413	65T75233W02	CP., 6V-80mA
△	PL413	65T75233W02	CP., 6V-80mA
○	PL414	65T75233W02	CP., 6V-80mA
●	PL414	65T75233W02	CP., 6V-80mA
△	PL414	65T75233W02	CP., 6V-80mA
○	PL415	65T75231W02	9V-85mA
●	PL415	65T75231W02	9V-85mA
△	PL415	65T75231W02	9V-85mA
	PL417	65T75232W01	CP., 6V-80mA
	PL418	65T75233W01	CP., 6V-80mA
	PL419	65T75233W01	CP., 6V-80mA

Capacitors

	Symbol No.	Part No.	Description
	C401	08S82122F59	CP., 820pF
	E401	23T25191W39	CP. ELY., 6.8μF / 6.3V
	C402	08T15399W03	CP., 0.047μF

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.		Part No.	Description
Resistors			(All resistors are chip 1/4W±5% unless otherwise noted.)
	R402	06S64995F77	10K ohm 1/10W
	R403	06S64995F77	10K ohm 1/10W
	R404	06S64995F69	4.7K ohm 1/10W
	R405	06S64995F77	10K ohm 1/10W
	R406	06S64995F53	1K ohm 1/10W
	R407	06S64995F53	1K ohm 1/10W
	R410	06S64995F53	1K ohm 1/10W
	R411	06S64995F53	1K ohm 1/10W
	R412	06S64995F53	1K ohm 1/10W
	R413	06S64995F53	1K ohm 1/10W
	R414	06S64995F53	1K ohm 1/10W
	R415	06S64995F69	4.7K ohm 1/10W
	R416	06S64995F97	68K ohm 1/10W
○	R422	06S64995F61	2.2K ohm 1/10W
●	R422	06S64995F61	2.2K ohm 1/10W
△	R422	06S64995F61	2.2K ohm 1/10W
○	R423	06S64995F61	2.2K ohm 1/10W
●	R423	06S64995F61	2.2K ohm 1/10W
△	R423	06S64995F61	2.2K ohm 1/10W
○	R424	06S64995F61	2.2K ohm 1/10W
●	R424	06S64995F61	2.2K ohm 1/10W
△	R424	06S64995F61	2.2K ohm 1/10W
○	R425	06S64995F61	2.2K ohm 1/10W
●	R425	06S64995F61	2.2K ohm 1/10W
△	R425	06S64995F61	2.2K ohm 1/10W
○	R426	06S64995F61	2.2K ohm 1/10W
●	R426	06S64995F61	2.2K ohm 1/10W
△	R426	06S64995F61	2.2K ohm 1/10W
○	R427	06S64995F61	2.2K ohm 1/10W
●	R427	06S64995F61	2.2K ohm 1/10W
△	R427	06S64995F61	2.2K ohm 1/10W
○	R428	06S64995F93	47K ohm 1/10W
●	R428	06S64995F93	47K ohm 1/10W
△	R428	06S64995F93	47K ohm 1/10W
	R429	06S64995F53	1K ohm 1/10W
	R430	06S64995F53	1K ohm 1/10W
○	R451	06S70072F09	15 ohm
●	R451	06S70072F09	15 ohm
△	R451	06S70072F09	15 ohm
○	R452	06S70072F09	15 ohm
●	R452	06S70072F09	15 ohm
△	R452	06S70072F09	15 ohm
	R453	06S70072F09	15 ohm
	R454	06S70072F09	15 ohm
	R455	06S70072F41	330 ohm
	R456	06S70072F43	390 ohm
○	R457	06S70072F41	330 ohm
●	R457	06S70072F41	330 ohm
△	R457	06S70072F41	330 ohm
○	R458	06S70072F39	270 ohm
●	R458	06S70072F39	270 ohm
△	R458	06S70072F39	270 ohm
	R459	06S70072F13	22 ohm
	R460	06S70072F13	22 ohm
○	R461	06S70072F13	22 ohm
●	R461	06S70072F13	22 ohm
△	R461	06S70072F13	22 ohm
○	R462	06S70072F15	27 ohm
●	R462	06S70072F15	27 ohm
△	R462	06S70072F15	27 ohm
○	R463	06S70072F16	30 ohm
●	R463	06S70072F16	30 ohm
△	R463	06S70072F16	30 ohm
○	R464	06S70072F16	30 ohm
●	R464	06S70072F16	30 ohm
△	R464	06S70072F16	30 ohm
	R465	06S70072F16	30 ohm
	R466	06S70072F16	30 ohm
	R467	06S70072F15	27 ohm
	R468	06S70072F15	27 ohm
	R469	06S70072F14	24 ohm
	R470	06S70072F14	24 ohm
	R471	06S70072F13	22 ohm
	R472	06S70072F41	330 ohm
	R473	06S70072F67	3.9K ohm
○	R474	06S70072F37	220 ohm
●	R474	06S70072F37	220 ohm
△	R474	06S70072F37	220 ohm
○	R475	06S70072F39	270 ohm
●	R475	06S70072F39	270 ohm
△	R475	06S70072F39	270 ohm
○	R476	06S70072F16	30 ohm
●	R476	06S70072F16	30 ohm
△	R476	06S70072F16	30 ohm
○	R477	06S70072F16	30 ohm
●	R477	06S70072F16	30 ohm
△	R477	06S70072F16	30 ohm
○	R478	06S70072F17	33 ohm
●	R478	06S70072F17	33 ohm
△	R478	06S70072F17	33 ohm
	R479	06S70072F39	270 ohm
	R481	06S64995F46	510 ohm 1/10W

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
○ R482	06S64995F53	1K ohm 1/10W
● R482	06S64995F53	1K ohm 1/10W
△ R482	06S64995F53	1K ohm 1/10W

GR Control P.C.Board (●)

IC's

Symbol No.	Part No.	Description
IC3102	51T75010W01	BA3703F
IC3501	51T75628W01	BA6285FP

Transistors

Symbol No.	Part No.	Description
Q3501	48T84366F05	2SB1243
Q3502	48T62967F06	CP., DTC114YK
Q3503	48T62967F06	CP., DTC114YK
Q3504	48T83835F03	2SD1859
Q3505	48T62967F06	CP., DTC114YK

Diodes

Symbol No.	Part No.	Description
D3501	48T81063F01	CP., MA159
D3502	48T81063F01	CP., MA159
ZD3501	48T83128F11	Zener, HZS7A2L

Capacitors

Symbol No.	Part No.	Description
E3107	23S75372W15	ELY., 1μF / 50V
E3108	23S75372W04	ELY., 10μF / 16V
C3111	08S65128F35	CP., 100pF
C3112	08S35374W01	CP., 0.1μF
C3113	08S82122F59	CP., 820pF
C3501	08S65128F76	CP., 0.1μF
E3501	23S75372W08	ELY., 100μF / 16V

Resistors

(All resistors are chip 1/10W±5% unless otherwise noted.)

Symbol No.	Part No.	Description
R3114	06S64995F85	22K ohm
R3115	06S64995F85	22K ohm
R3116	06S64995F85	22K ohm
R3117	06S64996F01	91K ohm
R3118	06S64995F95	56K ohm
R3119	06S64995F32	130 ohm
R3507	06S70072F41	330 ohm 1/4W
R3508	06S70072F41	330 ohm 1/4W
R3509	06S64995F77	10K ohm
R3510	06S70072F60	2K ohm 1/4W
R3511	06S70072F60	2K ohm 1/4W
R3512	06S53331F01	91K ohm 1/8W
R3513	06S53331F01	91K ohm 1/8W
R3514	06S70072F53	1K ohm 1/4W
R3515	06S81094F05	M.F., 3.3 ohm 1/2W

GR Control P.C.Board (○△□)

IC's

Symbol No.	Part No.	Description
IC1101	51T64606F02	TA7705F
IC1102	51T75010W01	BA3703F
IC1501	51T75628W01	BA6285FP

Transistors

Symbol No.	Part No.	Description
Q1501	48T84366F05	2SB1243
Q1502	48T62967F06	CP., DTC114YK
Q1503	48T62967F06	CP., DTC114YK
Q1504	48T83835F03	2SD1859

Diodes

Symbol No.	Part No.	Description
D1101	48T81063F01	CP., MA159
D1501	48T81063F01	CP., MA159
D1502	48T81063F01	CP., MA159
ZD1501	48T83128F11	Zener, HZS7A2L

Capacitors

Symbol No.	Part No.	Description
E1101	23S75372W02	ELY., 100μF / 10V
E1102	23S75372W04	ELY., 10μF / 16V
E1103	23S75372W02	ELY., 100μF / 10V
E1104	23S75372W07	ELY., 47μF / 16V
C1105	08S72783F31	CP., 470pF
E1105	23S75372W09	ELY., 4.7μF / 35V
C1106	08S72783F31	CP., 470pF
E1106	23S75372W09	ELY., 4.7μF / 35V
C1107	08S72783F31	CP., 470pF
E1107	23S75372W15	ELY., 1μF / 50V
C1108	08S72783F31	CP., 470pF
E1108	23S75372W04	ELY., 10μF / 16V
C1109	08S53332F48	CP., 0.012μF
C1110	08S53332F48	CP., 0.012μF
C1111	08S65128F35	CP., 100pF
C1112	08S35374W01	CP., 0.1μF

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
C1113	08S82122F59	CP., 820pF
C1501	08S65128F76	CP., 0.1µF
E1501	23S75372W08	ELY., 100µF / 16V

Resistors

(All resistors are chip 1/10W±5% unless otherwise noted.)

Symbol No.	Part No.	Description
R1101	06S53330F32	130 ohm 1/8W
R1102	06S64996F15	360K ohm
R1103	06S64995F80	13K ohm
R1104	06S53330F80	13K ohm 1/8W
R1105	06S53330F32	130 ohm 1/8W
R1106	06S64995F80	13K ohm
R1107	06S64995F80	13K ohm
R1108	06S64996F15	360K ohm
R1109	06S53330F29	100 ohm 1/8W
R1110	06S53330F65	3.3K ohm 1/8W
R1111	06S53330F65	3.3K ohm 1/8W
R1112	06S53330F85	22K ohm 1/8W
R1113	06S53330F85	22K ohm 1/8W
R1116	06S64995F85	22K ohm
R1117	06S64996F01	91K ohm
R1118	06S64995F95	56K ohm
R1119	06S64995F32	130 ohm
R1507	06S70072F41	330 ohm 1/4W
R1508	06S70072F41	330 ohm 1/4W
R1509	06S64995F77	10K ohm
R1510	06S70072F60	2K ohm 1/4W
R1511	06S70072F60	2K ohm 1/4W
R1512	06S53331F01	91K ohm 1/8W
R1513	06S53331F01	91K ohm 1/8W
R1514	06S70072F53	1K ohm 1/4W
R1515	06S81094F09	M.F., 4.7 ohm 1/2W

GR Audio P.C.Board (●)

IC

Symbol No.	Part No.	Description
IC3101	51T64606F02	TA7705F

Diode

Symbol No.	Part No.	Description
D3101	48T81063F01	CP., MA159

Capacitors

	Symbol No.	Part No.	Description
	C3101	08T35389W09	PF., 470pF
	E3101	23S75372W02	ELY., 100µF / 10V
	C3102	08T35389W09	PF., 470pF
	E3102	23S75372W04	ELY., 10µF / 16V
	C3103	08T35389W09	PF., 470pF
	E3103	23S75372W02	ELY., 100µF / 10V
	C3104	08T35389W09	PF., 470pF
	E3104	23S75372W07	ELY., 47µF / 16V
	E3105	23S75372W09	ELY., 4.7µF / 35V
	E3106	23S75372W09	ELY., 4.7µF / 35V
	C3109	08T35122W02	PF., 0.012µF
	C3110	08T35122W02	PF., 0.012µF

Resistors

(All resistors are chip1/8W±5% unless otherwise noted.)

	Symbol No.	Part No.	Description
	R3101	06S53330F32	130 ohm
	R3102	06S64996F12	270K ohm 1/10W
	R3103	06S64995F79	12K ohm 1/10W
	R3104	06S64995F80	13K ohm 1/10W
	R3105	06S53330F32	130 ohm
	R3106	06S64995F80	13K ohm 1/10W
	R3107	06S64995F79	12K ohm 1/10W
	R3108	06S64996F12	270K ohm 1/10W
	R3109	06S53330F29	100 ohm
	R3110	06S53330F65	3.3K ohm
	R3111	06S53330F65	3.3K ohm
	R3112	06S53330F85	22K ohm
	R3113	06S53330F85	22K ohm

Miscellaneous

	Symbol No.	Part No.	Description
	CB501	09T75038W16	16P Connector
	CH401	09T75039W16	16P Connector
	ET001	09T55211W01	Antenna Receptacle
○	ET502	01T85236W01	Assy., RCA Connector (REAR OUT/FRONT OUT/SUB-W/Audio Interrupt In/Remote Turn-On)
●	ET502	01T85236W01	Assy., RCA Connector (REAR OUT/FRONT OUT/SUB-W/Audio Interrupt In/Remote Turn-On)
△	ET502	01T85236W02	Assy., RCA Connector (REAR OUT/ F-OUT/NFP/Remote Turn-On)

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

Symbol No.	Part No.	Description
□ ET502	01T85236W03	Assy., RCA Connector (REAR OUT/Remote Turn-On)
○ ET504	01T75292W04	Assy., ISO Connector (15A)
● ET504	01T75292W03	Assy., ISO Connector (7.5A)
△ ET504	01T75292W04	Assy., ISO Connector (15A)
□ ET504	01T75292W04	Assy., ISO Connector (15A)
○ HD1101	88T75612W02	Head
● HD1101	88T85509W01	Head
△ HD1101	88T75612W02	Head
□ HD1101	88T75612W02	Head
JK503	09T55071W11	Ai-NET Connector
○ LCD401	65T85084W01	LCD Display
● LCD401	65T85254W01	LCD Display
△ LCD401	65T85084W02	LCD Display
□ LCD401	65T85084W03	LCD Display
○ M1501	01V74500W16	Assy., Main Motor (13.2V-55mA)
● M1501	01V84200W63	Assy., Main Motor (6V-90mA)
△ M1501	01V74500W16	Assy., Main Motor (13.2V-55mA)
□ M1501	01V74500W16	Assy., Main Motor (13.2V-55mA)
M1502	01V74500W23	Assy., Sub Motor (7V-370mA)
PT1501	51T63433F03	Sensor, Photo ON2170-R2
PT1502	51T63433F03	Sensor, Photo ON2170-R2
S1501	40T15222W01	Switch, Detector (PACK IN)
S1502	40T15382W02	Switch, Detector (PAUSE)
S1503	40T15382W02	Switch, Detector (MODE)
S1504	40T15382W02	Switch, Detector (METAL)
VR402 S402	40T45670W05	Rotary Encoder Volume (AUDIO CONTROL/MODE • LOUD)

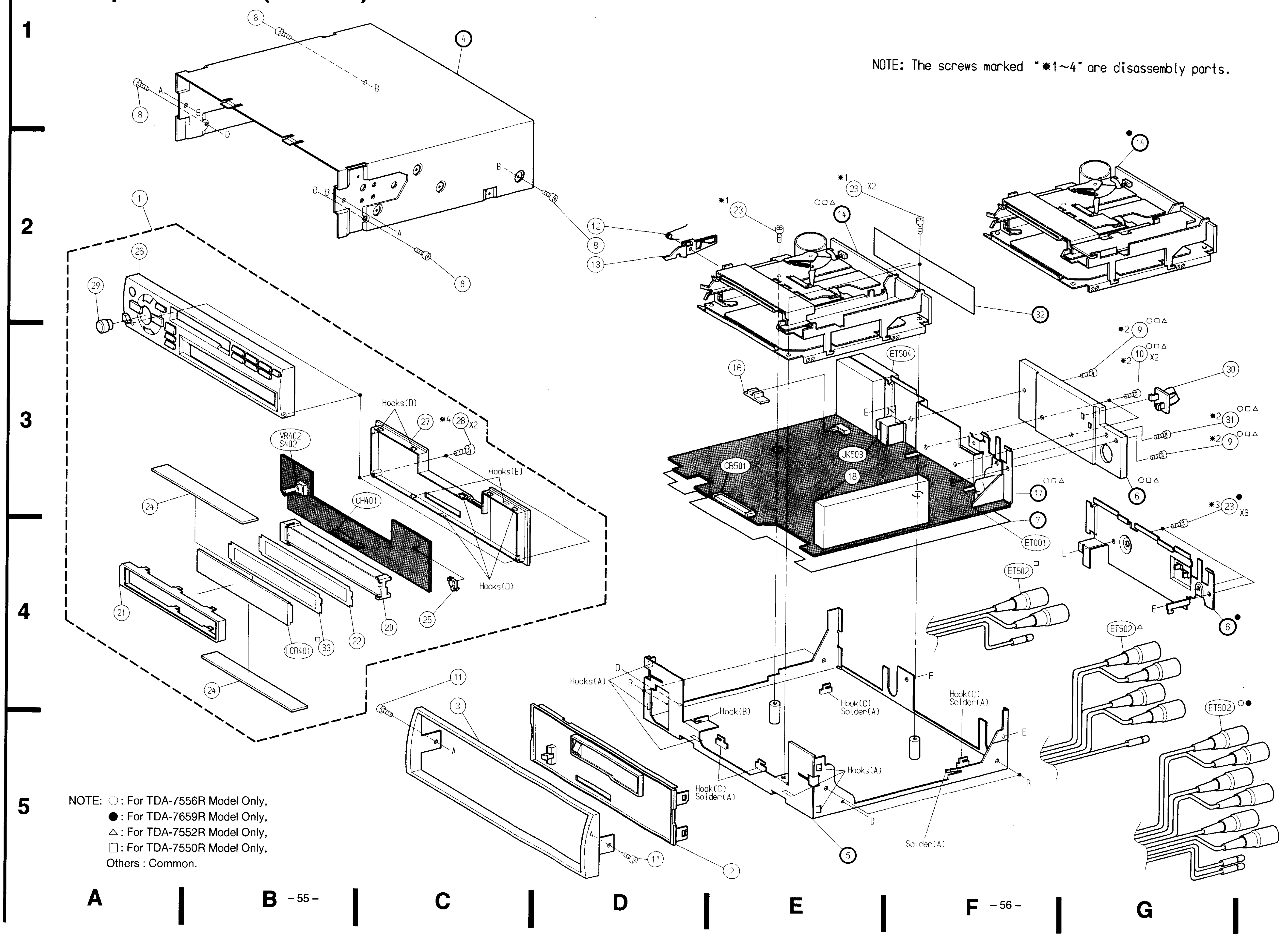
Symbol No.	Part No.	Description

NOTE : ○ : For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only, Others : Common.

MEMO

Exploded View (Cabinet)

NOTE: The screws marked "✱1~4" are disassembly parts.


1
2
3
4
5
8
4
A
B
D
B
8
D
B
A
8
1
26
29
12
8
13
8
Hooks(D)
27
✱4 28 X2
VR402
S402
Hooks(E)
CH401
24
Hooks(D)
25
21
LCD401
33
22
20
24
11
3
A
A
11
2
Hooks(A)
D
B
Hook(B)
Hook(C)
Solder(A)
Hooks(A)
Hook(C)
Solder(A)
Hook(C)
Solder(A)
E
E
B
D
Solder(A)
5
✱1
23 X2
✱1
23
○□△
14
14
32
16
ET504
E
CB501
JK503
18
17
○□△
7
ET001
✱2 9 ○□△
✱2 10 X2 ○□△
30
✱2 31 ○□△
✱2 9 ○□△
6 ○□△
✱3 23 X3
E
E
6
ET502 □
ET502 △
ET502 ○●
A
B
C
D
E
F
G

NOTE: ○ : For TDA-7556R Model Only,
● : For TDA-7659R Model Only,
△ : For TDA-7552R Model Only,
□ : For TDA-7550R Model Only,
Others : Common.

Cabinet Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
○	1	2-A	01V83100W28	Assy., Nose Unit
●	1	2-A	01V83100W66	Assy., Nose Unit
△	1	2-A	01V83100W57	Assy., Nose Unit
□	1	2-A	01V83100W61	Assy., Nose Unit
○	2	5-E	13C70374W04	Assy., Front Escutcheon
●	2	5-E	13C70374W05	Assy., Front Escutcheon
△	2	5-E	13C70374W04	Assy., Front Escutcheon
□	2	5-E	13C70374W04	Assy., Front Escutcheon
	3	5-C	33C00544K01	Assy., Face Plate
	or	5-C	33C81778W01	Assy., Face Plate
	8		03S38013W24	Screw, Pan (M2.6X6)
○	9	3-G	03S44205G33	Screw, Pan (M2.6X8)
△	9	3-G	03S44205G33	Screw, Pan (M2.6X8)
□	9	3-G	03S44205G33	Screw, Pan (M2.6X8)
○	10	3-G	03S38013W02	Screw, Pan (M2.6X14)
△	10	3-G	03S38013W02	Screw, Pan (M2.6X14)
□	10	3-G	03S38013W02	Screw, Pan (M2.6X14)
	11		03S38013W13	Screw, Bind (M2.6X6)
	12	2-D	41A20424W01	Spring, Door
	13	2-D	45C61079W01	Lever, Door
	16	3-E	36A70327W01	Knob, Slide
	18	3-E	77B60578W01	FM/MW/LW Tuner Unit, MB4R3010 (FE001)
	20	4-C	15C00540K01	Assy., Case, LCD
	21	4-A	15B00536K01	Cover, LCD
○	22	4-C	26A80519W03	Reflector, Sheet
●	22	4-C	26A80519W03	Reflector, Sheet
△	22	4-C	26A80519W03	Reflector, Sheet
□	22	4-C	26A80519W01	Reflector, Sheet
○	23		03S44205G29	Screw, Pan (M2.6X6)
●	23		03S44205G07	Screw, Pan (M2.6X5)
△	23		03S44205G29	Screw, Pan (M2.6X6)
□	23		03S44205G29	Screw, Pan (M2.6X6)
	24		75T85247W01	Rubber, Electric
	25	4-C	15A80548W01	Cover, LED
○	26	2-A	13D80502W01	Assy., Nosepiece
●	26	2-A	13D80502W09	Assy., Nosepiece
△	26	2-A	13D80502W07	Assy., Nosepiece
□	26	2-A	13D80502W08	Assy., Nosepiece
	27	3-C	13D80516W01	Nose, Bottom
	28	3-C	03S71677F56	Screw, Pan (M1.7X12)
	29	2-A	36B80547W01	Knob, Rotary (VOLUME)
	30	3-G	15A70387W01	Holder, Antenna
○	31	3-G	03S44205G61	Screw, Pan (M2.6X10)
△	31	3-G	03S44205G61	Screw, Pan (M2.6X10)
□	31	3-G	03S44205G61	Screw, Pan (M2.6X10)
□	33	4-B	26A80519W02	Reflector, Sheet

NOTE : ○ :For TDA-7556R Model Only, ● : For TDA-7659R Model Only, △ : For TDA-7552R Model Only,
□ :For TDA-7550R Model Only, Others : Common.

Disassembly Instructions

1. Removal of Nose Unit

(1) Refer to the Owner's Manual (Part No. 68P81402W53).

2. Removal of Front Escutcheon

(1) After removal of Face Plate and Top Cover, remove the Hooks (A). ....Hooks (A) (4-D, 5-E)

3. Removal of Cassette Deck

(1) After removal of Front Escutcheon, remove three screws No.23. ....Screws No. 23 (※1) (2-E)

(2) Remove the Hook (B). ....Hook (B) (5-E)

(3) Disconnect the connector from Main P.C. Board.

4. Removal of Main P.C. Board (TDA-7556R/7552R/7550R Model Only)

(1) After removal of Cassette Deck, remove five screws No. 9, 10, 31, and remove the Heat Sink. ....Screws No. 9, 10, 31 (※2) (3-G)

(2) Remove the Solder (A) and Hooks (C). ....Solder (A) (5-E, 5-F)
Hooks (C) (5-E, 5-F)

(3) Main P.C. Board with Bracket IC can be removed completely.

5. Removal of Main P.C. Board (TDA-7659R Model Only)

(1) After removal of Cassette Deck, remove three screws No. 23. ....Screws No. 23 (※3) (3-G)

(2) Remove the Solder (A) and Hooks (C). ....Solder (A) (5-E, 5-F)
Hooks (C) (5-E, 5-F)

(3) Main P.C. Board with Bracket Rear can be removed completely.

6. Removal of Front P.C. Board

(1) After removal of Nose Unit, remove the Rotary Knob and two screws No. 28. ....Screws No. 28 (※4) (3-C)

(2) Remove the Hooks (D), and remove the Nosepiece. ....Hooks (D) (3-C, 4-C)

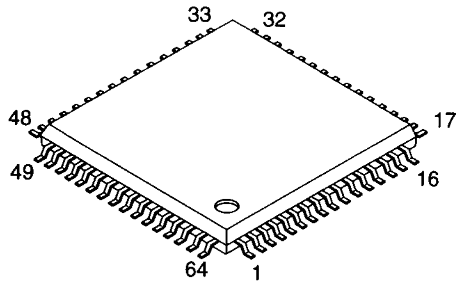
(3) Remove the Hooks (E). ....Hooks (E) (3-C)

NOTE: For the screws No., Hooks, and Solder, refer to the Exploded View (Cabinet).

Semi - Conductor Lead Identifications

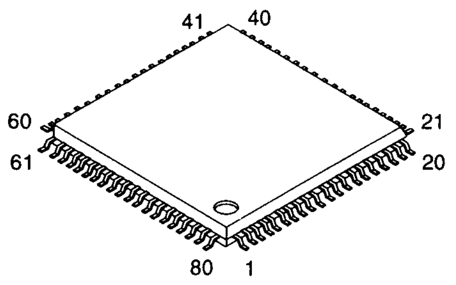
NOTE : For the parts not mentioned, refer to the Schematic Diagram.

85151W08 : IC501



PIN NO.	CODE ADDRESS		I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS		I/O
1	○●	NFP EV DATA	O	20	PACK IN	I	43	GND		—
	△□	NC	—	21	REV. DET	I	44	NC		—
2	NOSE PWR		O	22	MODE SW	I	45	GND		—
3	○●△	BUZZER	O	23	FOR DET	I	46	GND		—
	□	NC	—	24	GND	—	47	Ai-NET $\overline{\text{IN}}$/OUT		I
4	DTS START		O	25	PAUSE SW	I	48	○●	$\overline{\text{IN INT}}$	I
5	$\overline{\text{DTS MUTE}}$		I	26	MUTE	O		△□	PULL-DOWN	—
6	DTS CE		O	27	NFP-1	O	49	MODEL		I
7	ALARM		O	28	NFP-2	O	50	ENCODER 1		I
8	○●	NFP EV CE	O	29	EV-DATA	I/O	51	ENCODER 2		I
	△□	NC	—	30	EV-CLK	O	52	GND		—
9	GND		—	31	PWR IC	O	53	GND		—
10	$\overline{\text{DOLBY B}}$		O	32	PWR ON	O	54	NOSE-DET		I
11	○●△	$\overline{\text{DOLBY C}}$	O	33	NC	—	55	V_{DD}		—
	□	NC	—	34	BUS OUT	O	56	V_{DD}		—
12	L.O. FAST		O	35	$\overline{\text{RESET}}$	I	57	LCD DO		I
13	FOR/$\overline{\text{REV}}$		O	36	REMOCON	I	58	LCD DI		O
14	O. MOTOR		O	37	BUS IN	I	59	LCD CLK		O
15	R-IN		O	38	ACC DET	I	60	LCD CE		O
16	F-IN		O	39	BAT DET	I	61	LCD RST		O
17	MTR FAST		I	40	V_{DD}	—	62	DTS STS		I
18	M.S. DET		I	41	X2	O	63	DTS CMD		O
19	METAL		I	42	X1	I	64	$\overline{\text{DTS CLK}}$		O

85088W01 : IC502



PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	LW	O	21	NC	—	41	NC	—	61	RDS CLK	I
2	LO/$\overline{\text{DX}}$	O	22	NC	—	42	NC	—	62	RDS DATA	I
3	MONO	O	23	NC	—	43	NC	—	63	DTS CE	I
4	AV_{SS}	—	24	NC	—	44	NC	—	64	NC	—
5	$\overline{\text{LPF SW}}$	O	25	NC	—	45	NC	—	65	NC	—
6	IF MUTE	O	26	NC	—	46	NC	—	66	NC	—
7	$AV_{REF}1$	—	27	NC	—	47	NC	—	67	50K REF	O
8	RXD	I	28	NC	—	48	NC	—	68	V_{DD}	—
9	TXD	O	29	NC	—	49	NC	—	69	X2	—
10	SYNC	O	30	NC	—	50	NC	—	70	X1	—
11	PLL CLK	O	31	NC	—	51	NC	—	71	GND	—
12	PLL DATA	O	32	NC	—	52	NC	—	72	NC	—
13	PLL CE	O	33	GND	—	53	NC	—	73	PLL DATA I	I
14	DTS MUTE	O	34	NC	—	54	NC	—	74	AV_{DD}	—
15	DTS START	I	35	NC	—	55	NC	—	75	$AV_{REF}0$	I
16	DTS CMD	I	36	NC	—	56	NC	—	76	S.METER	I
17	DTS STS	O	37	NC	—	57	NC	—	77	A/I	I
18	DTS CLK	I	38	NC	—	58	FM/$\overline{\text{AM}}$	O	78	M.P	I
19	NC	—	39	NC	—	59	AUDIO IN	I	79	ST	I
20	NC	—	40	NC	—	60	RESET	I	80	SD	I

NOTE: ○: For TDA-7556R Model Only, ●: For TDA-7659R Model Only, △: For TDA-7552R Model Only,
□: For TDA-7550R Model Only, Others : Common.

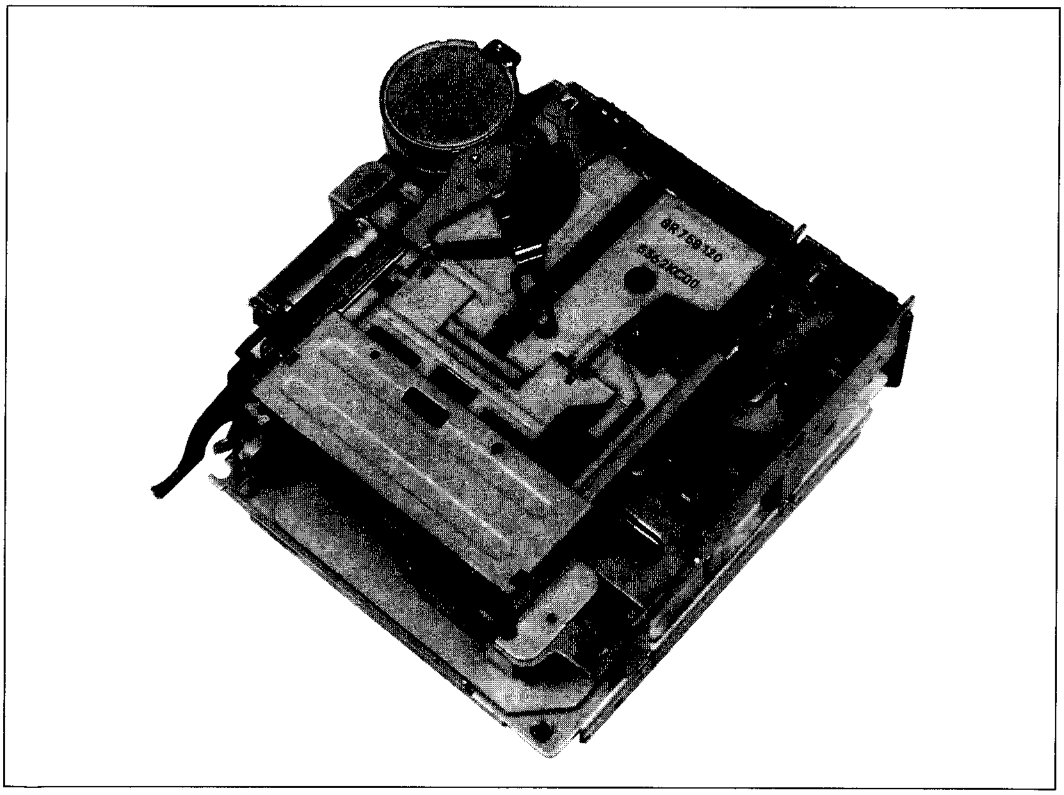
MEMO

441

ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism


8R759130
5562KC10

GR-S SERIES

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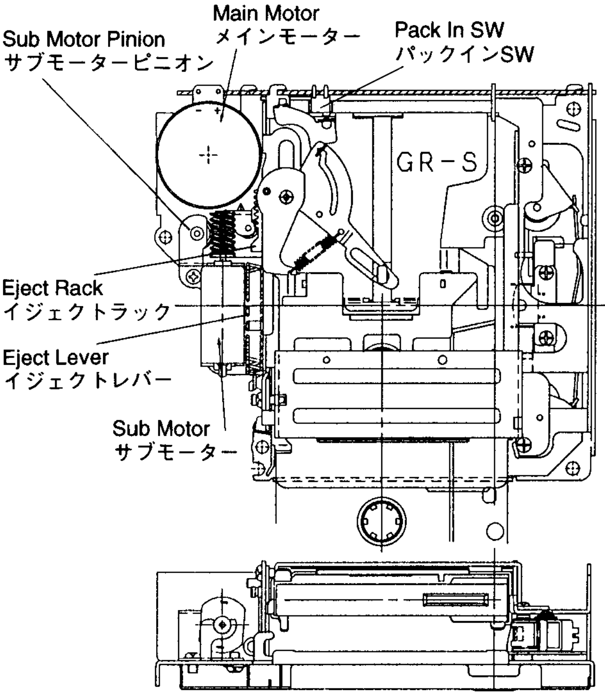
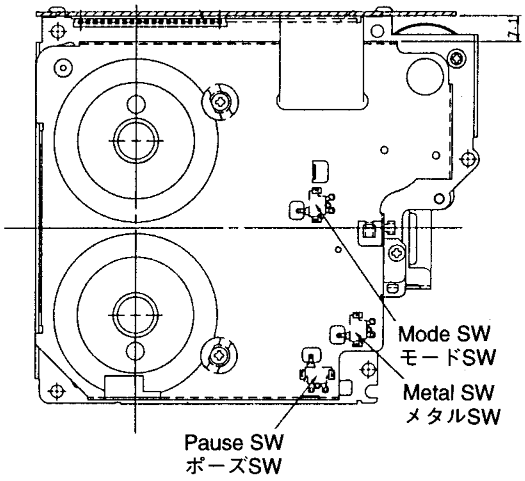
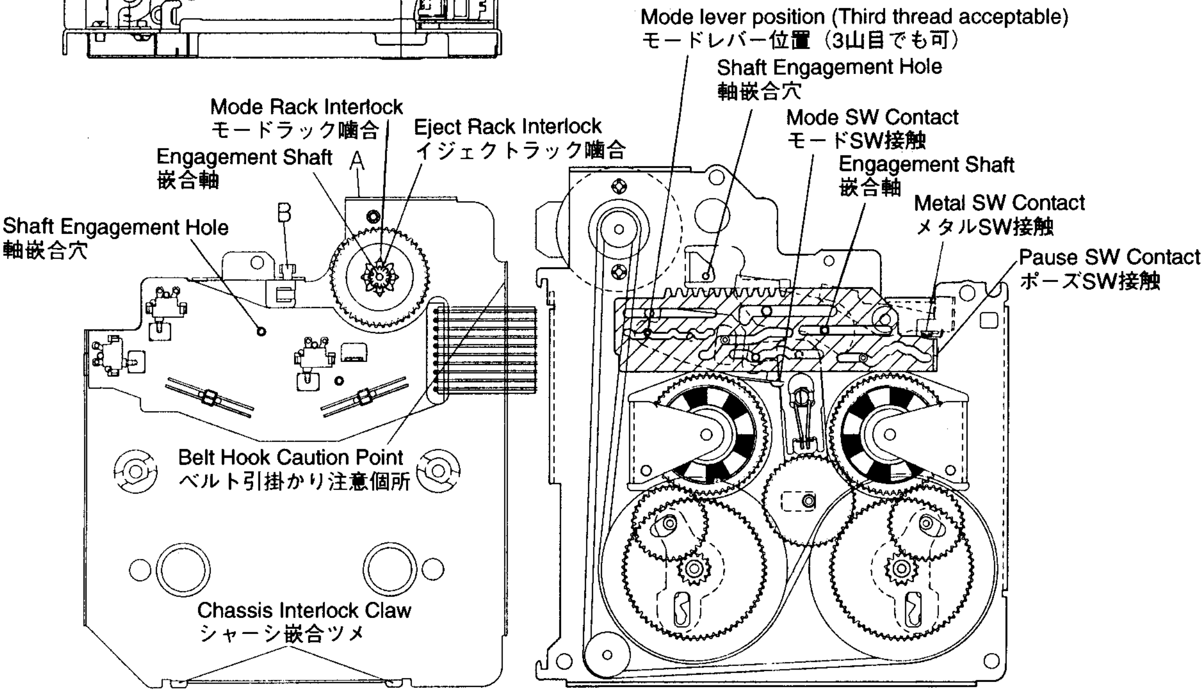
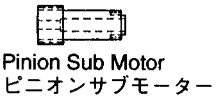
Disassembly, Assembly and Replacement of Function Parts .... 12 to 21
Exploded View (Cassette Deck Mechanism) .... 23 to 24
Cassette Deck Mechanism Assembly Parts List 25

Basic Operation of GR-S Mechanism
GR-Sメカ基本動作


Main Motor
メインモーター
Sub Motor Pinion
サブモーターピニオン
Pack In SW
パックインSW
GR-S
Eject Rack
イジェクトラック
Eject Lever
イジェクトレバー
Sub Motor
サブモーター


Mode SW
モードSW
Metal SW
メタルSW
Pause SW
ポーズSW


Mode lever position (Third thread acceptable)
モードレバー位置（3山目でも可）
Shaft Engagement Hole
軸嵌合穴
Mode SW Contact
モードSW接触
Engagement Shaft
嵌合軸
Metal SW Contact
メタルSW接触
Pause SW Contact
ポーズSW接触
Mode Rack Interlock
モードラック噛合
Eject Rack Interlock
イジェクトラック噛合
Engagement Shaft
嵌合軸
A
B
Shaft Engagement Hole
軸嵌合穴
Belt Hook Caution Point
ベルト引掛かり注意個所
Chassis Interlock Claw
シャーシ嵌合ツメ


Pinion Sub Motor
ピニオンサブモーター

Mode rack engagement should be made so that normal engagement is obtained when an end of section A touches the chassis closely with the pinion sub motor inserted in place and rotated after temporary installation of the bottom cover. In this case, the sub motor wires should be positioned in the normal guide of the section B (should not be jammed). The metal lever should be installed by moving the switch contact section to inside of the mechanism as in GR-H.

モードラックの噛合せはボトムカバー仮装着後PINION SUB MOTORを正規位置に挿入して回転させる。
A部端面がシャーシと密着出来たとき正常な噛合い状態になったことを意味する。
又このときサブモータワイヤがB部の正規ガイド位置にあること。（挟み込みさせないこと。）
メタルレバーはGR-Hと同様にSW接触部をメカ内部に移動させて組み込むこと。

A. Loading

1. Insert a cassette pack.
2. PACK IN SW goes ON→OFF.
3. SUB motor rotates and the power is transferred to SUB MOTOR PINION, EJECT rack, and EJECT lever, and moves to the direction shown by the arrow.
4. After completion of the cassette pack loading, motion start of the mode lever is detected by checking ON→OFF of the PAUSE SW, and rotation of the SUB MOTOR stops once, and then the SUB MOTOR rotates in reverse direction until the PAUSE SW is ON again. After the stop of the SUB MOTOR, the main motor rotates.
5. When the main motor rotates, both reels rotate in the winding direction and eliminate slack of the tape at the PAUSE position. (Loading completion)

A. ローディング

1. カセットパックを挿入する。
2. PACK IN SWがON→OFFになる。
3. SUBモーターが回転してSUB MOTOR PINION、EJECTラック、EJECTレバーと動力が伝達し、矢印方向へ移動する。
4. カセットパック装着完了後、モードレバーが動き始めたことを、PAUSE SWがON→OFFすることで、検知しSUB MOTORの回転を一旦停止させ、再度PAUSE SWがONするまで逆回転させる、SUB MOTOR停止後メインモーターを回転させる。
5. メインモーターの回転により、両リールを巻き取り方向に回転させ、テープのタルミをPAUSE位置でなくする。（ローディング完了）

B. Play

1. Rotation of the main motor stops and the SUB MOTOR rotates, thereby moving the mode lever to the PLAY position.
2. Motion of the mode lever to the PLAY position is detected by checking ON/OFF number of the mode SW and rotating direction of the sub motor.
3. After detection of the mode lever moved to the PLAY position, the SUB MOTOR rotation stops and the main motor rotates, thus entering the PLAY operation.

B. プレイ

1. メインモーターの回転を停止させ、SUB MOTORを回転させて、モードレバーをPLAY位置に移動させる。
2. モードレバーのプレイ位置への移動はモードSWのON/OFF回数とサブモーターの回転方向で検知する。
3. モードレバーがPLAY位置に移動したことを検知したら、SUB MOTORの回転を停止し、メインモーターを回転させてPLAY動作に入る。

C. PROG

1. With the PROG KEY SW ON, the SUB MOTOR rotates, and the mode lever moves to next PLAY position (NORMAL→REVERSE PLAY or REVERSE→NORMAL PLAY).
2. When the mode switch detects the next PLAY position, the SUB MOTOR rotation stops, and operation shifts to the PLAY.

C. PROG

1. PROG KEY SW ONにより、SUB MOTORを回転させ、モードレバーを次のPLAY位置（NORMAL→REVERSE PLAY又は、REVERSE→NORMAL PLAY）に移動させる。
2. モードSWが次のPLAY位置を検知したらSUB MOTORの回転を停止し、PLAYに移行する。

D. FF/REW (QUE/REVIEW)

1. With KEY ON, rotation of the main motor stops and the SUB MOTOR rotates to bring the mode lever to the specified position.
2. When the specified position is detected by counting ON/OFF number of the mode SW, the SUB MOTOR rotation stops, and the main motor rotates to perform tape fast winding operation.
   (According to the stop position of the mode lever, all of head position retreat, playback engagement releasing, pinch roller retreat, and FF gear engagement are kept.)

D. FF/REW (QUE/REVIEW)

1. KEY ONによりメインモーターの回転を停止し、SUB MOTORを回転させモードレバーを所定の位置に移動させる。
2. モードSWのON/OFF回数をカウントし、所定の位置を検知したらSUB MOTORの回転を停止し、メインモーターを回転させ、TAPE早送り動作を行う。
   （モードレバーの停止位置により、ヘッド位置後退、プレイ噛み合い切り離し、ピンチローラー後退、早送り歯車の噛み合いは、全て維持される。）

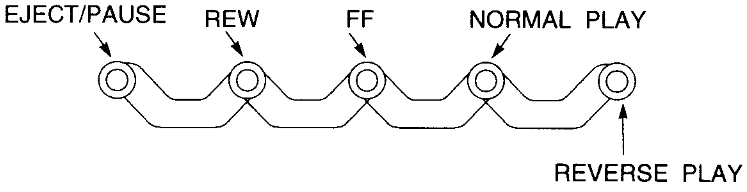
E. EJECT

1. With KEY ON, main motor rotation stops and SUB MOTOR rotates, thereby moving the mode lever to the EJECT/PAUSE position.
2. When the PAUSE SW turns on with the mode lever moved , the SUB MOTOR rotation stops, the main motor rotates to perform take up operations for both the reels.
3. When beginning of the reel slip is detected with tape slack eliminated, the main motor rotation stops and the sub motor rotates to move the EJECT lever in the eject direction.
4. When the PACK IN SW goes from OFF to ON, the SUB MOTOR rotation stops and the EJECT operation completes.

E. EJECT

1. KEY ONにより、メインモーターの回転を停止すると共に、SUB MOTORを回転させ、モードレバーをEJECT/PAUSE位置に移動させる。
2. モードレバーの移動は、PAUSE SWがONした所でSUB MOTORの回転を停止しメインモーターを回転させ両リールの巻き取り動作を行う。
3. テープタルミが無くなり、リールスリップが始まったことを、検知したらメインモーターの回転を停止し、SUB MOTORを回転させてEJECTレバーを排出方向に移動させる。
4. PACK IN SWがOFF→ONに切り換わったらSUB MOTORの回転を停止させEJECT完了となる。

Mode lever position
モードレバー位置



Mechanism operations are determined by positions of the mode lever shown above.
メカの動作は上記モードレバーの位置で決まる。

Operations of MODE SW and PAUSE SW

MODE SW、 PAUSE SWの動作

REV. PLAY

Mechanism operation shift メカ動作の移行		MODE SW	PAUSE SW
Loading	→Play	4	2
	FF		
	REW		
Play	→FF	3	0
	REW	2	0
	PROG	1	0
	EJECT	4	1 (OFF→ON)
FF	→Play	3	0
	REW	1	0
	PROG		
	EJECT	1	1 (OFF→ON)
REW	→Play	2	0
	FF	1	0
	PROG		
	EJECT	2	1 (OFF→ON)

ON→OFF number of above switches
上記SWのON→OFF回数

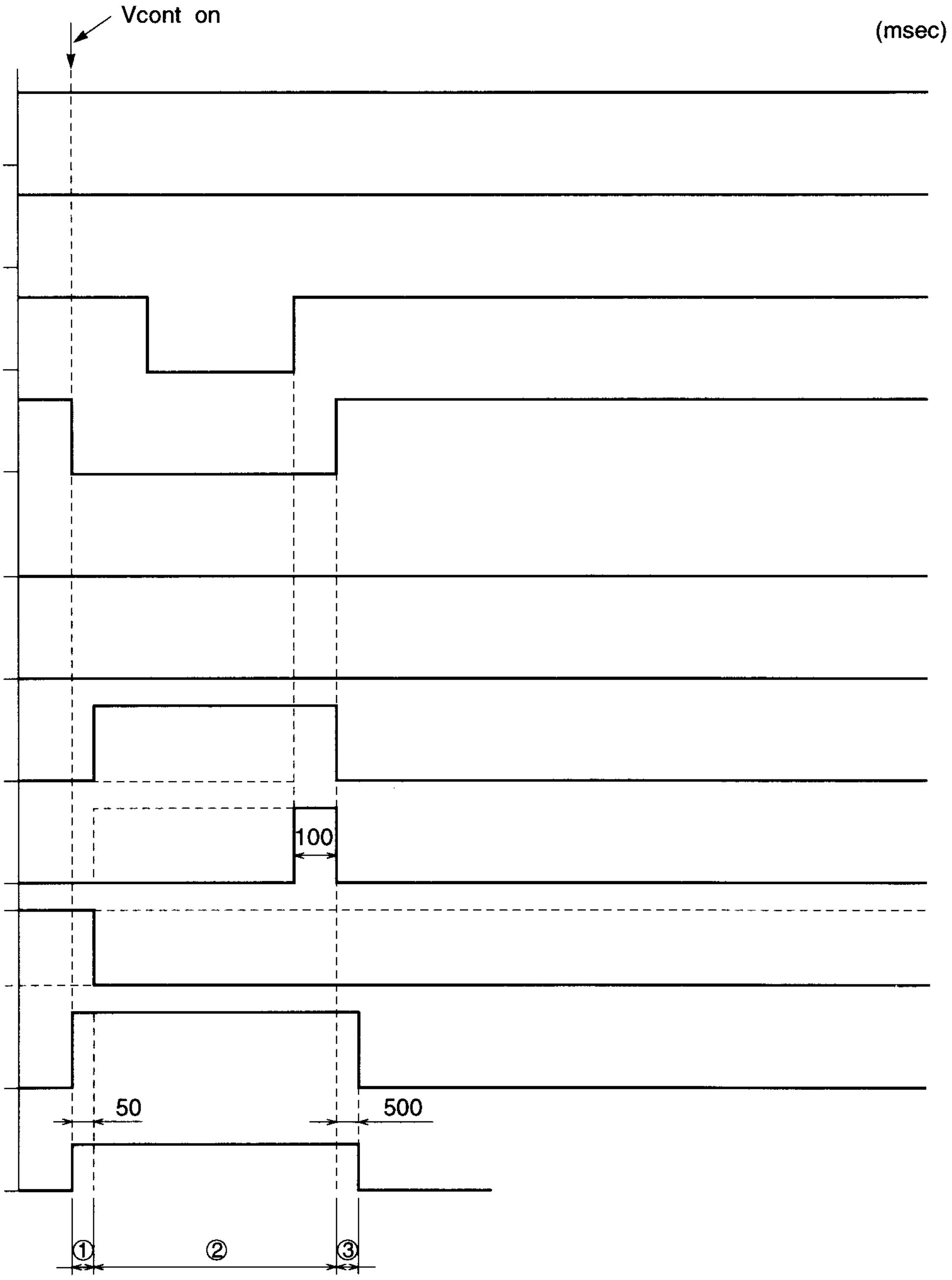
FOR. PLAY

Mechanism operation shift メカ動作の移行		MODE SW	PAUSE SW
Loading	→Play	3	2
	FF		
	REW		
Play	→FF	1	0
	REW	2	0
	PROG	1	0
	EJECT	3	1 (OFF→ON)
FF	→Play	1	0
	REW	1	0
	PROG		
	EJECT	2	1 (OFF→ON)
REW	→Play	2	0
	FF	1	0
	PROG		
	EJECT	1	1 (OFF→ON)

ON→OFF number of above switches
上記SWのON→OFF回数

Mechanism basic operation timing chart
メカニズム基本動作タイミングチャート

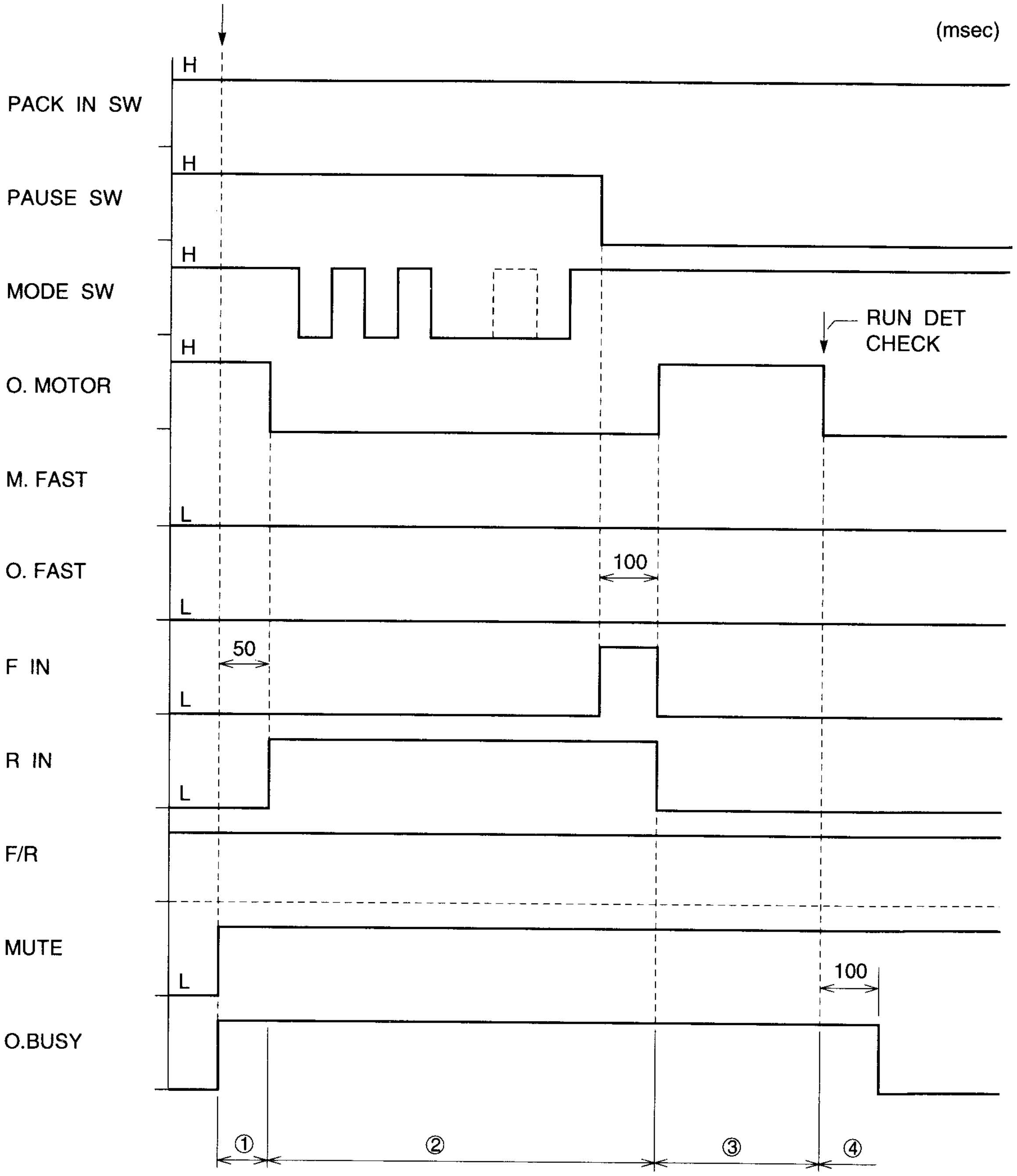
Shift MODE	PLAY → PLAY (PROG)
移行モード	PLAY → PLAY (PROG)



① Tape wind stop: Main motor stops.
② Mode lever shift: SUB MOTOR rotates, mode lever moves to a specified position and stops.
③ Mode determination: Muting until operation reaches a stable status.

① TAPE巻取り停止：MAIN MOTORを停止させる。
② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。
③ MODE確定：動作安定までMUTE。

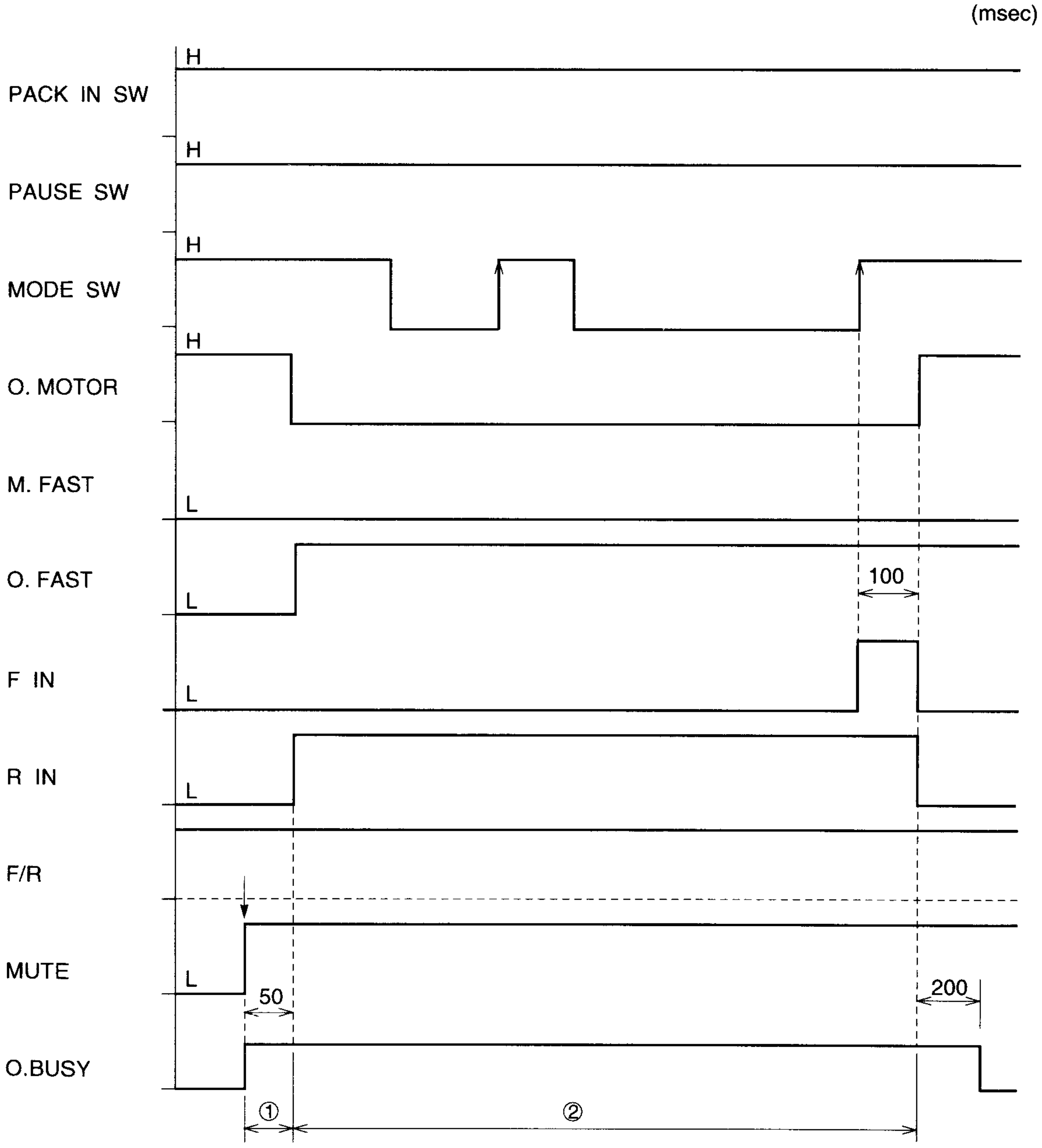
Shift MODE　　PLAY → PAUSE
移行モード　　PLAY → PAUSE



① Tape wind stop: Main motor stops.
② Mode lever shift: Sub motor rotates, mode lever moves to a specified position and stops.
③ Removal of tape slack: Both reel rotate in winding direction and eliminate tape slack.
④ Reel stop: Main motor stops when run det pulse reaches a specified value.

① TAPE巻取り停止：MAIN MOTOR停止
② MODE LEVER移動：SUB MOTORを回し、MODE LEVERを目的の位置まで移動させ停止させる。
③ TAPE弛み取り：両リールを巻取方向へ回転させ、TAPEの弛みを無くす。
④ リール停止：RUNDET PULSが設定値に達したらMAIN MOTORを停止させる。

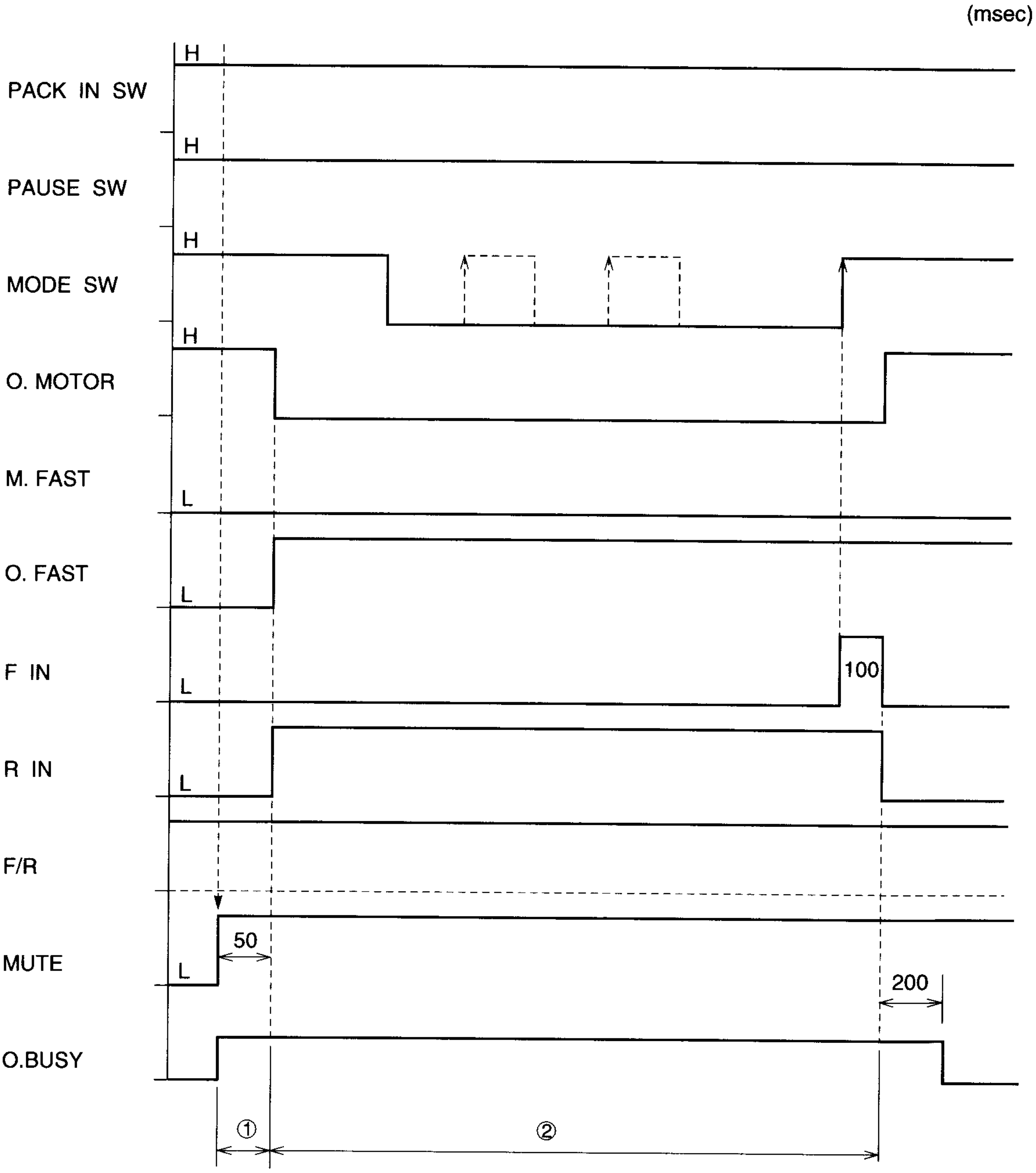
Shift MODE PLAY → REW
移行モード PLAY → REW



① Tape wind stop: Main motor stops.
② Mode lever shift: Sub motor rotates and mode lever moves to a specified position and stops.

① TAPE巻取り停止：MAIN MOTOR停止
② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。

Shift MODE PLAY → FF
移行モード PLAY → FF


(msec)
PACK IN SW
H
PAUSE SW
H
MODE SW
H
O. MOTOR
H
M. FAST
L
O. FAST
L
F IN
L
100
R IN
L
F/R
MUTE
L
50
200
O.BUSY
①
②

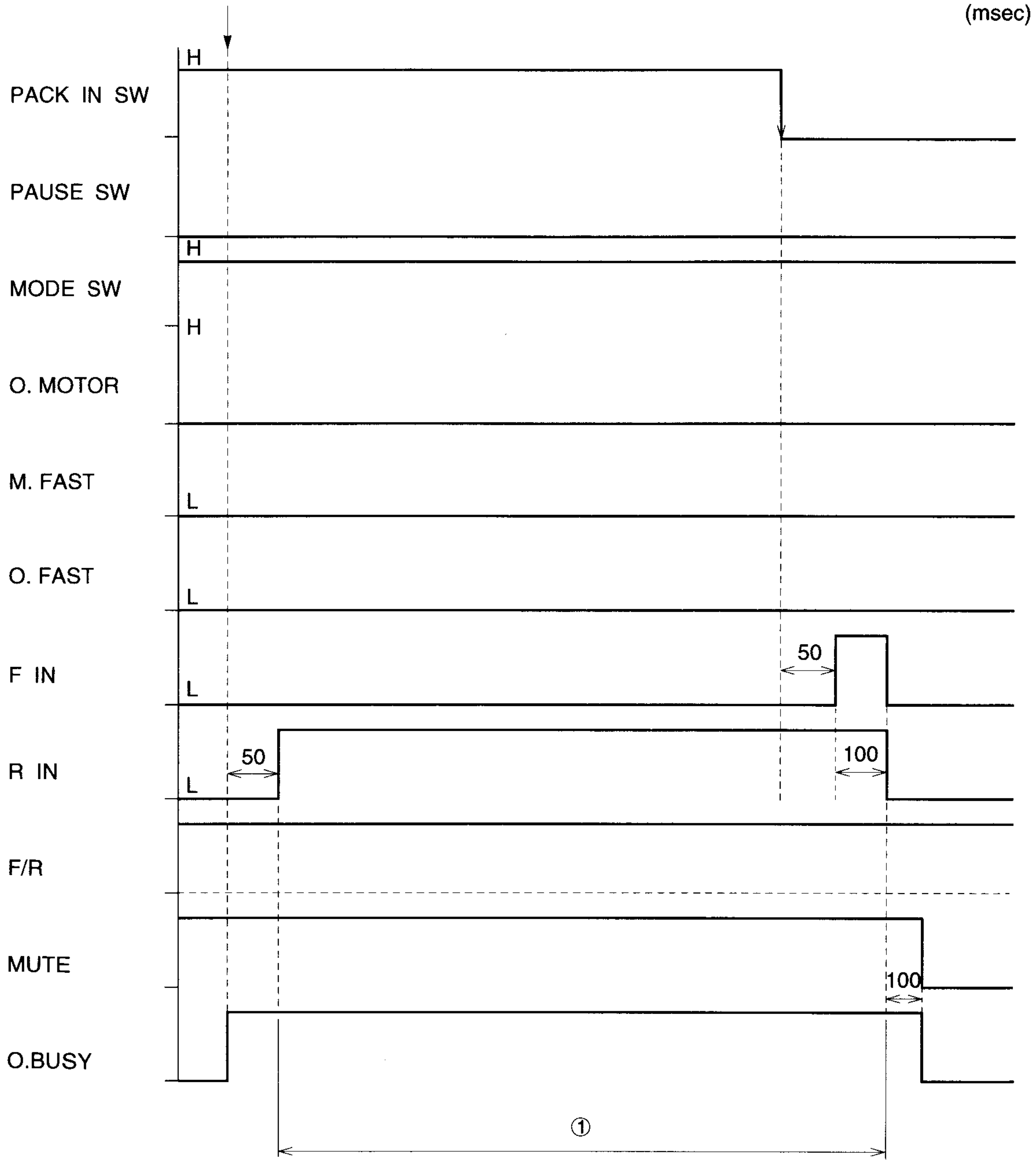
① Tape wind stop: Main motor stops.

② Mode lever shift: Sub motor rotates and mode lever moves to a specified position and stops.

① TAPE巻取り停止：MAIN MOTOR停止

② MODE LEVER移動：SUB MOTORを回しMODE LEVERを目的の位置まで移動させ停止させる。

Shift MODE PAUSE → EJECT
移行モード PAUSE → EJECT


(msec)
PACK IN SW
H
PAUSE SW
H
MODE SW
H
O. MOTOR
M. FAST
L
O. FAST
L
F IN
L
50
R IN
L
50
100
F/R
MUTE
100
O.BUSY
①

① Cassette pack eject: Rotates sub motor and lifts up the cassette holder.
Rotates the sub motor further to move slider forward and ejects the pack.

① カセットパック排出：SUB MOTORを回しCASSETTE HOLDERをリフトさせる。
さらにSUB MOTORを回しスライダーを手前に移動させPACKを排出させる。

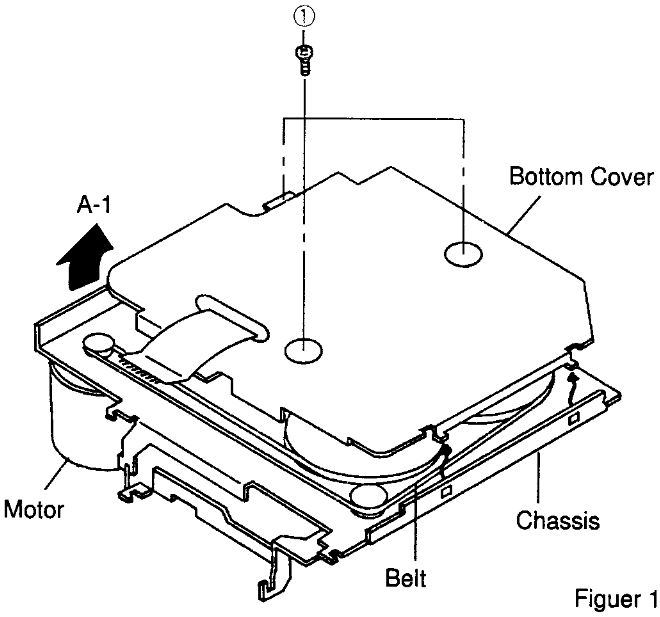
Disassembly, Assembly and Replacement of Functional Parts
機能部品の分解・組立及び交換方法

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.
(2) Remove three screws ① as shown in Figure 1.
(3) Lift the bottom cover slowly from the position A-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.
(4) Set the mechanism to pack down status and place the mode lever to the position shown in Figure 2-1.
(5) Press the metal switch lever in direction shown by the arrow (refer to Figure 2-2), insert the pinion sub motor shaft to the pinion sub motor hook hole, and insert the chassis engagement claws into the chassis engagement holes. (Check to see the sub motor wire is placed in the normal guide position of B section.)
(6) Rotate the pinion sub motor counterclockwise after insertion of the bottom cover, and check to see the end place of A section in Figure 2 is closely touched. (refer to Figure 3)
(7) Fix the screws that have been removed.
NOTE : ① When fixing the bottom cover, be careful to avoid damage by the belt.
② Fasten the three screws with a fastening torque of 6 kg.cm.

1. ボトムカバーの分解方法及び組立方法

(1) メカを裏返しにします。(図1参照)
(2) 3本のネジ①を外します。(図1参照)
(3) A -1部からボトムカバーをゆっくりと浮かし、切り起こしの嵌合部を外し、分解します。(図1参照)
(4) 組立時は、メカをパックDOWN状態にして、モードレバーの位置を図2-1の位置に合わせます。
(5) メタルSWレバーを矢印方向（図2-2参照）に押し、SUB MOTOR嵌合軸をSUB MOTOR軸嵌合穴に挿入し、シャーシー嵌合ツメをシャーシー嵌合穴に挿入します。←ボトムカバー仮装着完了。
(この時、サブモーターワイヤーがB部正規ガイド位置にあること)
(6) ボトムカバー仮装着後SUB MOTORを左回りに回し、図2A部端面がシャーシと密着したことを確認します。(図3参照)
(7) 分解時に外したネジを止めます。
[注意] ① 組立時、ベルトに傷を付けない様に注意して下さい。
② 3本のネジは6kgcmのトルクで締め付けて下さい。



Figuer 1

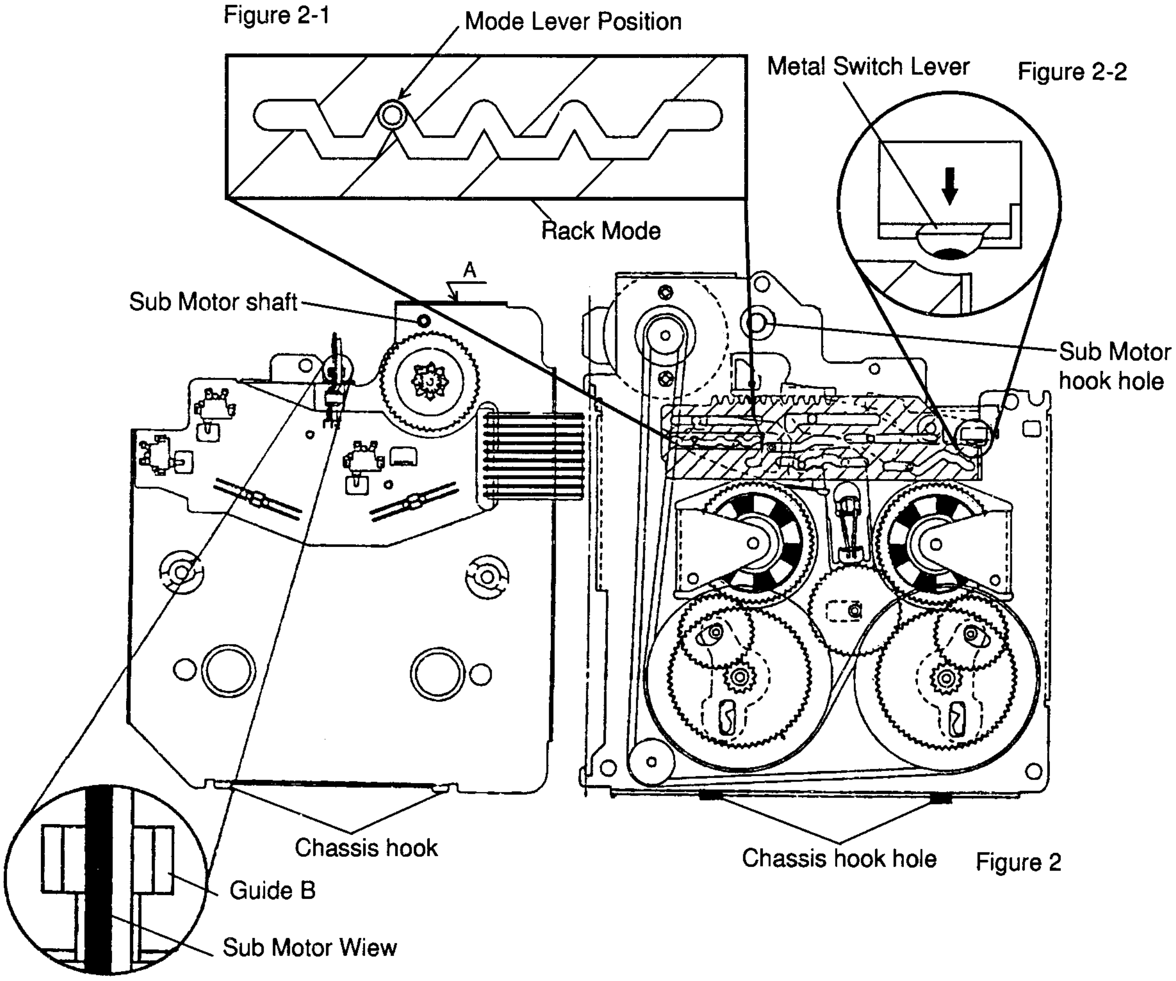


Figure 2-1
Mode Lever Position
Metal Switch Lever
Figure 2-2
Rack Mode
A
Sub Motor shaft
Sub Motor
hook hole
Chassis hook
Chassis hook hole
Guide B
Sub Motor Wiew

Figure 2

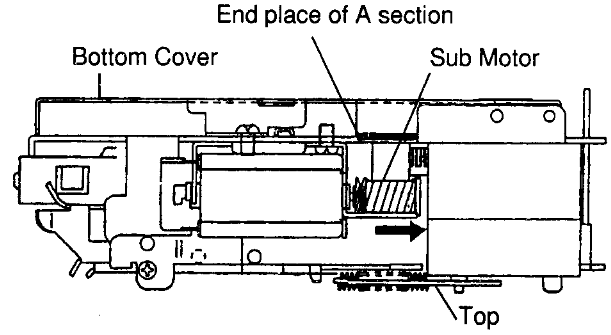

End place of A section
Bottom Cover
Sub Motor
Top

Figure 3

2. Replacement of the bottom cover mounting parts

2. ボトムカバーの取付部品の交換方法

a. Replacement of the inner gear/planet gear/sun gear

(1) Remove M1.2 lock washer ② as shown in Figure 4.
(2) Pull the eject pinion out of the inner gear and remove the inner gear, eject base pinion and sun gear as shown in Figure 4.
(3) Turn the eject base pinion, remove the three planet gear as shown in Figure 4.
(4) Apply the grease (PG-671) to the section B-1, and mount the inner gear/planet gear/sun gear following the removal steps in the reverse order. After replacement is smoothly. (Refer to Figure 6.)
NOTE : ① Do not reuse the used lock washer for remounting.
② Take care to avoid damage by piercing and tearing.
③ Do not forget insertion of planet gears. Check number of the gears also.

a. インナーギア／プラネットギア／サンギアの交換方法

(1) ロックワッシャー②（M1.2）を外します。(図4参照)
(2) イジェクトピニオンをインナーギアより引き抜き、インナーギア／イジェクトベースピニオン／サンギアの順に外します。(図4参照)
(3) イジェクトベースピニオンを裏返しにしてプラネットギア（3個）を外します。(図4参照)
(4) B-1部分にグリス（PG-671）を塗布し、取り外しの逆の手順で組み立てて下さい。尚交換後、ギアの回転がスムーズであるか確認して下さい。(図6参照)
[注意] ① 一度使用したロックワッシャーは組立時には使用しないで下さい。
② 口開き、めくれのない様に注意して下さい。
③ プラネットギアの挿入忘れ、不足のないこと。

b. Replacement of the photo sensor

(1) Remove eight solders 21 as shown in Figure 5.
(2) Remove the photo sensor from the photo P.C.Board as shown in Figure 5.
(3) Solder the legs so that the photo sensor is set as indicated by [---] in Figure 5.
NOTE : ① When using the soldering iron, set the temperature of the soldering iron to 270° ±20℃and the soldering time to less than 3 seconds.
② Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

b. フォトセンサーの交換方法

(1) 8ケ所の半田21を外し、フォトセンサーをフォト基板より外します。(図5参照)
(2) 良品のフォトセンサーを図中の[---]と同じ方向になる様に半田付けします。(図5参照)
[注意] ① 半田ゴテを使用する際、
半田ゴテ先温度270° ±20℃、
半田付け時間3秒以下とする。
② ルーズ半田、ショート等のないこと。又、皮膜破れに注意すること。

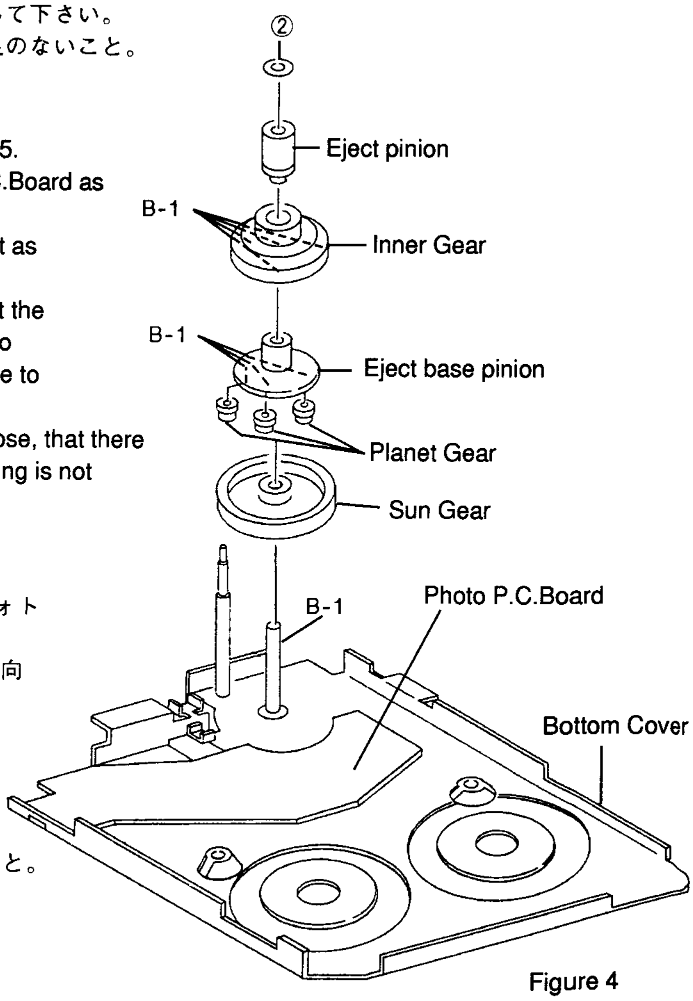


Figure 4

c. Replacement of the detector switch (Pause/Metal/Mode)

(1) Remove six solders 22 with which the switch is fixed as shown in Figure 5.
(2) Prepare the terminals of the switch of the new one as shown in Figure 6.
(3) After that, insert the switch into the photo P.C.Board, and solder the terminals.
NOTE : ① When using the soldering iron, refer to item 2-b to make sure that the temperature of the soldering iron and the soldering time are proper.
② Take care that the switch guide is properly fixed and straight.

c. 検出スイッチ（ポーズ・メタル・モード）の交換方法

(1) スイッチを止めている6ケ所の半田22をそれぞれ外します。（図5参照）
(2) 良品のスイッチの端子を水平に直します。（図6参照）
(3) フォト基板に差し込み、端子を半田付けします。
[注意] ① 項目2-bと同様に半田ゴテのコテ先温度、半田付け時間に注意すること。
② スイッチの浮き及び傾きがない様にすること。

3. Replacement of the mounting parts on the rear of the main chassis

3. メインシャーシー裏側取付部品の交換方法

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.
(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 7.
NOTE : ① When fixing the belt, make sure that is not twisted or dirty.
② When removing the belt, do not turn up the front of chassis.

a. ベルトの交換方法

(1) ボトムカバーを外した後、ベルトを取り外します。
(2) 良品のベルトを無水アルコールでクリーニングしてから掛けます。（7図参照）
[注意] ① 取り付け時、ねじれ及び汚れがない様にすること。
② ベルトを取り外した時、シャーシーを表側にしないこと。

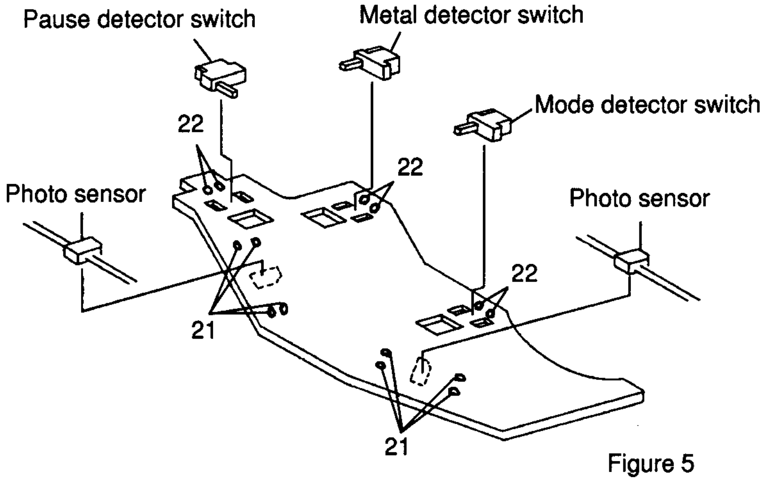

Pause detector switch
Metal detector switch
Mode detector switch
22
22
22
Photo sensor
Photo sensor
21
21

Figure 5

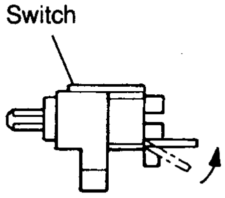


Figure 6

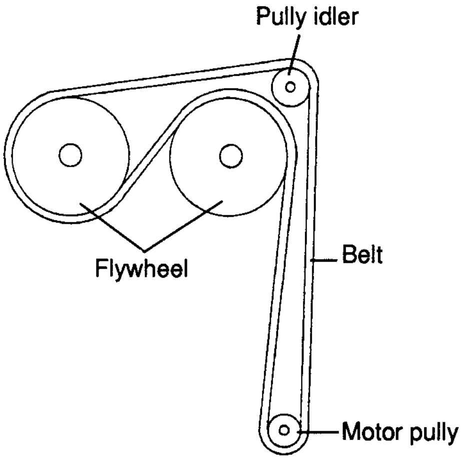

Pully idler
Flywheel
Belt
Motor pully

Figure 7

b. Replacement of the main motor

(1) After removing the belt, remove solder ⑫-1, and remove the wire flat (2P) from the control P.C.Board as shown in Figure 10.

(2) Remove two screws ⑦, and remove the main motor as shown in Figure 8.

(3) Mount the new motor following the removal steps in the reverse order.

NOTE : ① When using the soldering iron, set the temperature of the soldering iron to 320° ±20℃ and the soldering time to less than 3 seconds.
② Since the wire flat is very easily damaged, handle it with care.
③ Fasten the two screws with a fastening torque of 2kg.cm.

b. メインモーターの交換方法

(1) ベルトを外した後、半田⑫-1を外し、ワイヤーフラット (2P) をコントロール基板より外します。(図10参照)

(2) 2本のネジ⑦を外し、メインモーターを外します。(図8参照)

(3) 良品のメインモーターを取り外し方法の逆の手順で組み立てます。

[注意] ① 半田ゴテを使用する際、半田ゴテ先温度320° ±30℃、半田付け時間3秒以下とする。
② ワイヤーフラットは損傷し易いので取扱いには十分注意すること。
③ 2本のネジは2kgcmのトルクで締め付けること。

c. Replacement of the flywheel

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑤ located between the flywheel and the chassis. (Refer to Figure 8)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to chassis.

c. フライホイールの交換方法

(1) ベルトを外した後、2個のフライホイールを引き抜きます。この時フライホイールとシャーシーの間にそれぞれ1個のポリスライダーワッシャー⑤がありますので紛失しない様に注意して下さい。(図8参照)

(2) 良品のフライホイールにポリスライダーワッシャーを取り付け、シャーシに取り付けます。

d. Replacement of the rack mode

(1) Remove M1.7 lock washer ③, and remove the rack mode as shown in Figure 8.

(2) Apply the molykote G paste to the section D-3, and mount the rack mode following the removal steps in the reverse order. (Refer to Figure 8)

NOTE : ① Check to see the rack mode can move left to right in its full stroke.
② Do not reuse the used lock washer for remounting.
③ Take care to avoid damage by piercing and tearing.

d. ラックモードの交換方法

(1) 2個のロックワッシャー③ (M1.7) を外し、シャーシーより引き抜き、ラックモードを外します。(図8参照)

(2) 良品のラックモードのD-3部分にモリコートGペーストを塗布し、取り外しの逆の手順で取り付けます。

[注意] ① ラックモードは左右に全ストローク動作することを確認する。
② 一度使用したロックワッシャーは組立時には使用しないで下さい。
③ ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

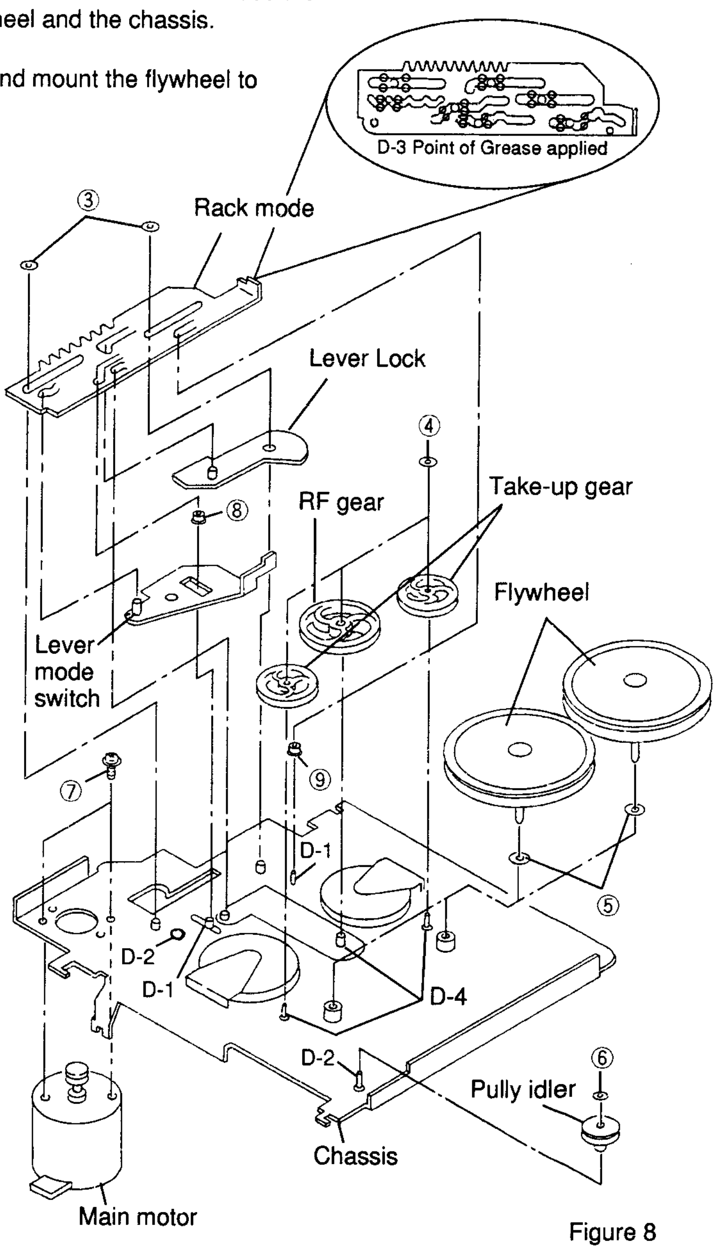


Figure 8

e. Replacement of the lever lock/lever mode switch/roller mode

(1) After removing the rack mode, remove the lever lock and lever mode switch. (Refer to Figure 8)

(2) Pull it up from the stud and remove the two roller mode ⑧, ⑨ as shown in Figure 8.

(3) Apply the molykote G paste to the section D-1, the grease (PG-671) to the section D-2 and mount the roller mode/lever mode switch/lever lock following the removal steps in the reverse order.
NOTE : ① Check to see the roller mode is inserted without fail.

e. レバーロック／レバーモードスイッチ／ローラーモードの交換方法

(1) ラックモードを外した後、レバーロック、レバーモードスイッチの順に引き抜きます。（図8参照）

(2) 2個のローラ-モード⑧、⑨をスタットより引き抜きます。（図8参照）

(3) D-1部分にモリコートGペースト、D-2部分にグリス（PG-671）を塗布し、取り外し方の逆の手順で取り付けます。
[注意] ① ローラーモードの挿入忘れがないこと。

f. Replacement of gears

f-1 Replacement of the RF gear

(1) Remove M1.2 lock washer④, pull it up from the stud and remove the gear as shown in Figure 8.

(2) Mount it, following the removal steps in the reverse order.

f-1 RFギアの交換方法

(1) ロックワッシャー④（M1.2）を外し、スタットより引き抜きギアを外します。（図8参照）

(2) 取り外し方の逆の手順で取り付けます。

f-2 Replacement of the take-up gear

(1) Remove M1.2 lock washer④, pull it up from the stud and remove the gear as shown in Figure 8.

(2) Mount it, following the removal steps in the reverse order.
NOTES on f-1 and f-2 :
① Do not reuse the used lock washer for remounting.
② Take care to avoid damage by piercing and tearing.

f-2 テイクアップギアの交換方法

(1) 2個のロックワッシャー④（M1.2）を外し、スタットより引き抜きギアを外します。（図8参照）

(2) 取り外し方の逆の手順で取り付けます。
[f1，f2の注意]
① 一度使用したロックワッシャーは組立時には使用しないで下さい。
② ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

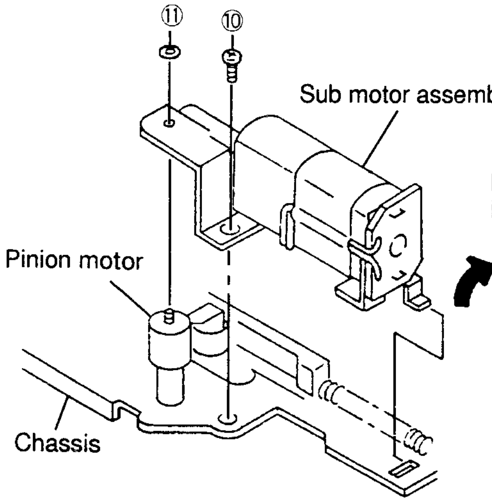


Figure 9

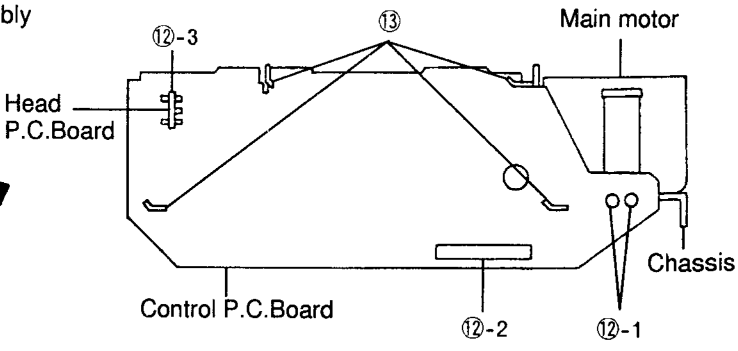


Figure 10

4. Replacement of the parts mounted on the front of the main chassis

4. メインシャーシ表側部品の交換方法

a. Replacement of the control P.C.Board

(1) Remove four solders ⑫ and remove the head P.C.Board and the two wire flat as shown in Figure 10.

(2) Remove four claws ⑬ and remove the P.C.Board as shown in Figure 10.

(3) After replacing the old P.C.Board with a new one, mount it following the removal steps in the reverse order.

NOTE : ① Since the wire flat is very easily damaged, handle it with care.

② When using the soldering iron, set the temperature of the soldering iron to 320° ±30℃ and the soldering time to less than 3 seconds, but solder point ⑫-3 to less than 1 second.

③ Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

a. コントロール基板の交換方法

(1) 4ケ所の半田⑫を外し、ヘッド基板と2本のワイヤーフラット（2P)、(10P）をそれぞれ外します。(図10参照)

(2) 4ケ所のツメ⑬を外し、コントロール基板を外します。(図10参照)

(3) 良品のコントロール基板と交換後、取り外し方の逆の手順で基板を取り付けます。

[注意] ① ワイヤーフラットは損傷し易いので取扱いには十分注意すること。

② 半田ゴテを使用する際、半田ゴテ先温度320° ±30℃、半田付け時間3秒以下とする。
但し、⑫-3は1秒以下とする。

③ ルーズ半田、ショート等のないこと。

b. Replacement of the sub motor assembly

(1) Remove M1.2 lock washer ⑪ and one screw ⑩ as shown in Figure 9.

(2) Remove the sub motor assembly by pulling it up in the direction of the arrow as shown in Figure 9.

(3) Mount it, following the removal steps in the reverse order.

NOTE : ① Do not reuse the used lock washer for remounting.

② Take care to avoid damage by piercing and tearing.

③ Fasten the one screw with a fastening torque of 6kg.cm.

b. サブモーター組立の交換方法

(1) ロックワッシャー⑪（M1.2）と1本のネジ⑩を外します。(図9参照)

(2) 図中の矢印の方向へ持ち上げながらサブモーター組立を外します。(図9参照)

(3) 取り外し方の逆の手順で取り付けます。

[注意] ① 一度使用したロックワッシャーは組立時には使用しないで下さい。

② ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

③ ネジは6kgcmのトルクで締め付けること。

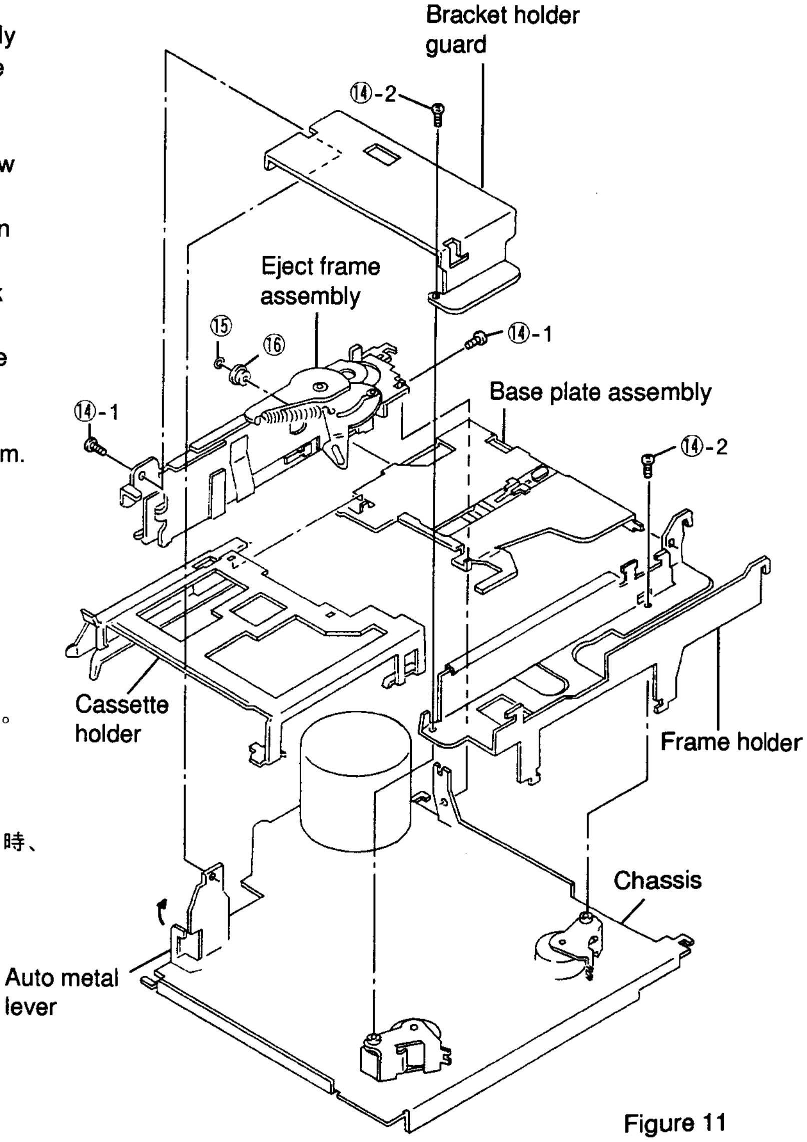


Figure 11

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ⑭ and remove the eject frame assembly and the frame holder as shown in Figure 11.

(2) Remove M1.2 lock washer ⑮ and plate base roller ⑯ and remove the cassette holder and the base plate assembly as shown in Figure 11.

(3) Remount them following the removal steps in the reverse order.

NOTE : ① When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indcated by the arrow in the figure . Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 12)

② When mounting the eject frame assembly, push the auto metal lever in the direction indicated by the arrow in the Figure 11.

③ When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.

④ Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

⑤ Fasten the two screws ⑭-1 with a fastening torque of 6kg.cm. and the two screws ⑭-2 with a fastening torque of 1.5kg.cm.

c. カセットホルダーの分解方法及び組立方法

(1) 4本のネジ⑭を外し、イジェクトフレーム組立及びフレームホルダーを外します。(図11参照)

(2) ロックワッシャー⑮（M1.2）とプレートベースローラー⑯を外し、カセットホルダーとベースプレート組立を外します。(図11参照)

(3) 分解方法と逆の手順で取り付けます。

[注意] ① カセットホルダーとベースプレート組立を組み立てる際、スライダーのシャフトをイジェクトアームに挿入し、図の様に矢印方向に回しながら取り付けます。この時カセットホルダーとベースプレートはカセットインの状態で行うこと。(図12参照)

② イジェクトフレーム組立をシャーシーに取り付ける際、オートメタルレバーを図の様に矢印方向に押して下さい。(図11参照)

③ ベースプレート組立とイジェクトフレーム組立を取り付ける際、又、シャーシーとイジェクトフレーム組立を取り付ける際は、必要以上の力を加えないで下さい。(イジェクトアーム、フレームの変形防止の為)

④ 一度使用したワッシャーは、使用しないこと。又、口開き、めくれのないこと。

⑤ ネジ⑭-1は6kgcm、⑭-2は1.5kgcmのトルクで締め付けること。

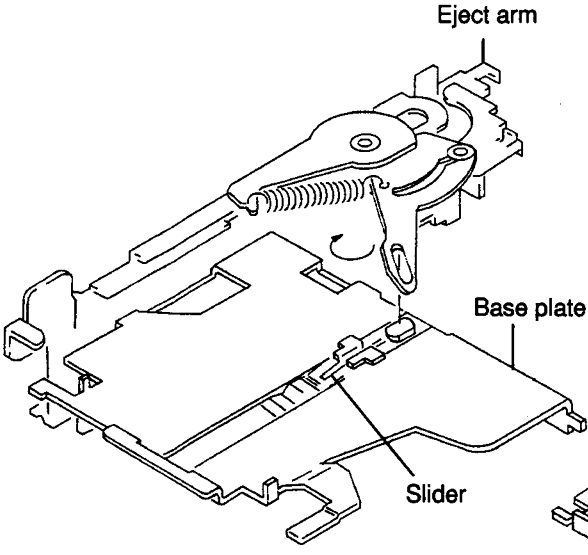


Figure 12

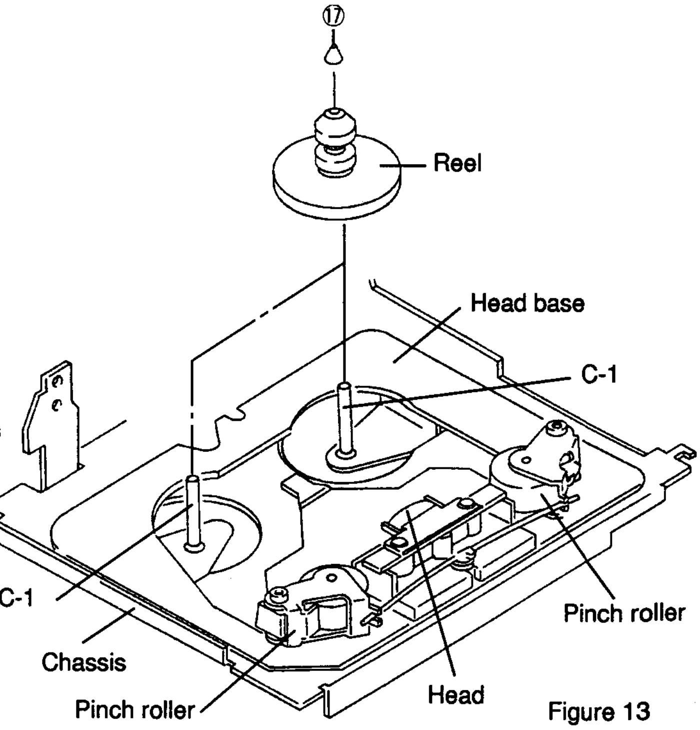


Figure 13

d. Replacement of the reels

(1) Remove two reel cap ⑰ as shown in Figure 13.

(2) After replacement, apply the grease (PG-671) to the section C-1, and mount the new reels following the removal steps in the reverse order.

(3) After mounting, check the tape speed and the wow & flutter with test tape MTT-111N.
NOTE : ① Since the reel is easily loosened if the cap is gripped, always handle it gripping, the gear.

d. リールの交換方法

(1) 2個のリールキャップ⑰をそれぞれ外します。(図13参照)

(2) 良品のリールと交換後C-1部分にグリス（PG-671）を塗布し、取り外し方の逆の手順で取り付けます。

(3) 取り付け後、必ずテストテープ（MTT-111N）でテープスピード・ワウフラッターの確認をすること。
[注意] ① リールの取り外し、取り付けの際、キャップをつかむと外れ易いので必ずギア部をつかんで行って下さい。

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ⑱ as shown in Figure 14.

(2) Remove M3.1 two lock washers ⑲ and remove the pinch roller and guide pack as shown in Figure 14.

(3) Mount the pinch rollers following the removal steps in the reverse order. Apply the molykote G paste to the section C-2 as shown in Figure 14.
NOTE : ① Make sure that the pinch rollers are thoroughly fixed and that they are not deformed.
② Do not reuse the used lock washers for remounting.
③ Take care to avoid damage by piercing and tearing.

e. ピンチローラーの交換方法

(1) ピンチローラースプリング⑱を外します。(図14参照)

(2) 2個のロックワッシャー⑲（M3.1）をそれぞれ外し、ガイドパックと一緒にピンチローラーを外します。(図14参照)

(3) C-2部分にモリコートGペーストを塗布し、取り外し方の逆の手順で取り付けます。
[注意] ① ピンチローラーの半掛け、変形のないこと。
② 一度使用したロックワッシャーは組立時には使用しないで下さい。
③ ロックワッシャー取り付け時、口開き、めくれのない様に注意すること。

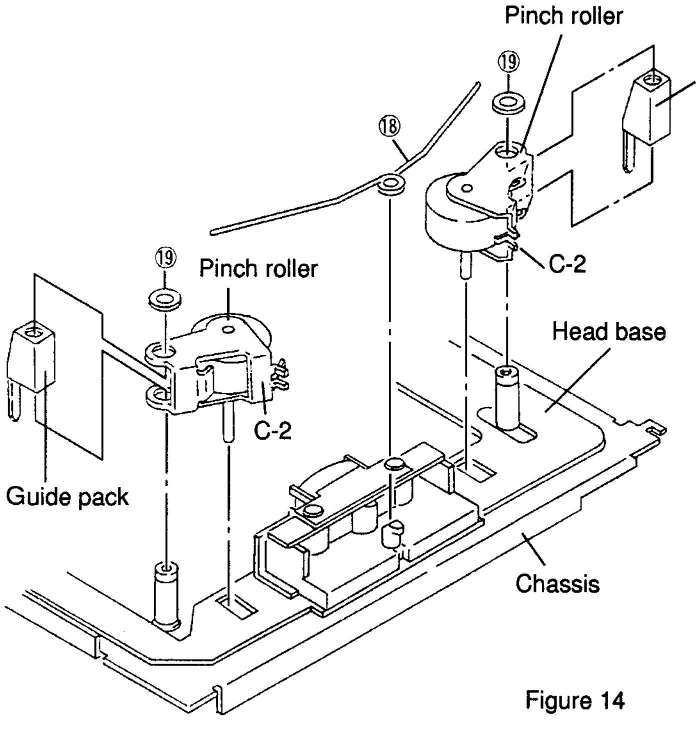


Figure 14

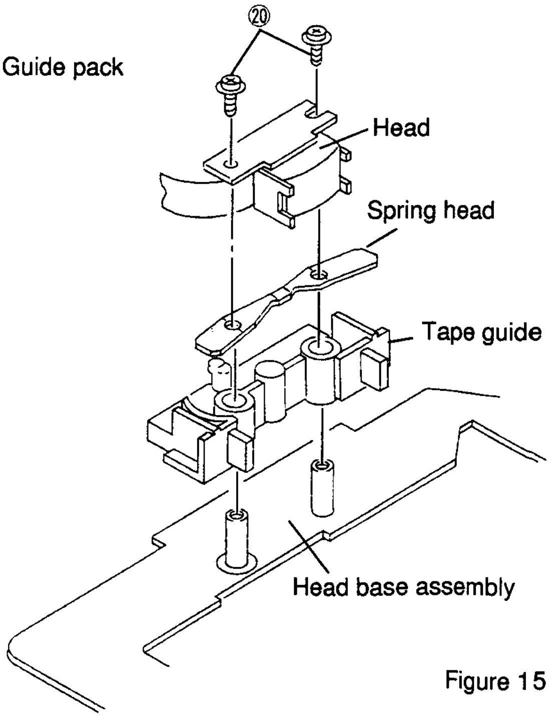


Figure 15

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ⑳ as shown in Figure 15.

(2) Remove solder 23 and remove the head from the head P.C.Board as shown in Figure 16.

(3) After replacement, mount the new head following the removal steps in the reverse order.

NOTE : ① When using the soldering iron, set the temperature of the soldering iron to270° ±20℃ and the soldering time to less than 1 second.

② Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damage.

③ Do not bring the soldering iron near the head P.C.Board. Make sure that the head P.C.Board is not lifted.

④ Fasten the two screws with a fastening torque 1kg.cm. Note that the tension of the head spring can be descreased if the screws are fastened too strongly.

(4) Adjust the height of the head as shown in Figure 17, 18 and 19.

(4) -1 Place the height adjustment gauge(AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

(4) -2 When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t0.1mm or polyslider washer t0.13mm). If necessary, remove the spacer.

NOTE : ① If you do not have a height gauge like described in (4)-1, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-114NB. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

f. ヘッドの交換方法

(1) ピンチローラースプリングを外した後、2本のネジ⑳を外します。(図15参照)

(2) 半田23を外し、ヘッド基板からヘッドを取り外します。(図16参照)

(3) 良品のヘッドと交換後、取り外し方の逆の手順で取り付けます。

[注意] ① 半田ゴテを使用する際、半田ゴテ先温度270° ±20℃、半田付け時間1秒以下とする。

② ルーズ半田、ショート等のないこと。

③ ヘッド基板には、コテ先を当てないこと。又、ヘッド基板に浮きがない様注意すること。

④ 2本のネジは1kgcmのトルクで締め付けること。但し、ネジを締め過ぎるとヘッドバネがヘタり、バネ性がなくなるので注意すること。

(4) ヘッド高さ調整を行います。(図17、18、19参照)

(4) -1 高さゲージ (AI-500) をヘッドベースにのせ、チェック・バーがテープヘッドガイドにスムーズに入る高さに合わせます。

(4) -2 テープガイドの上 (又は下) にチェック・バーが当たる時は、スペーサー (t0.1mm又はポリスライダーワッシャーt0.13mm) を一枚入れます。又は、スペーサーを外すことによって当りをなくす様にします。

[注意] ① (4) -1の様に高さゲージがない場合は、テープを通常走行させ、テープカーリングが生じなくなる様に高さ (ヘッド及びテープヘッドガイド) を調整します。

(5) 最終的な1台のメカと言う状態に組み上げた後、テストテープ (MTT-114NB) でヘッドの角度を調整します。(ヘッド角度調整方法の項目を参照して下さい。) 調整後、ネジロックを塗布し、ネジを固定します。

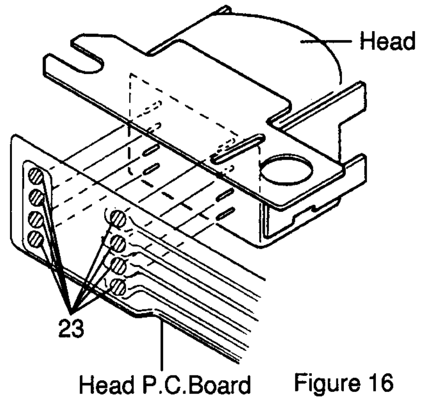


Figure 16

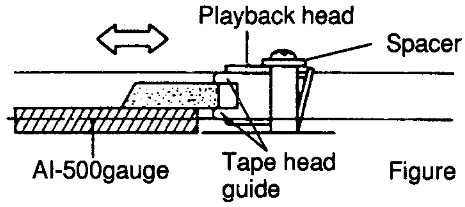


Figure 18

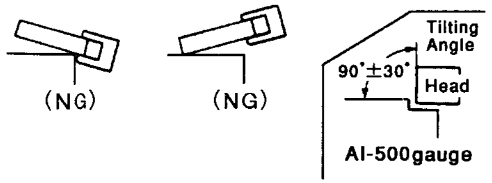
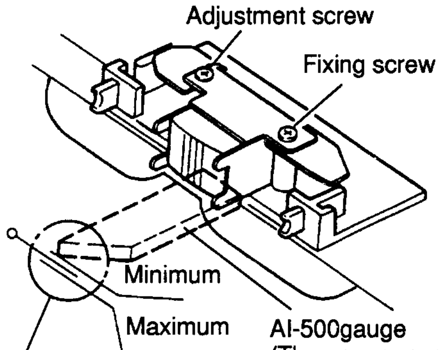


Figure 17



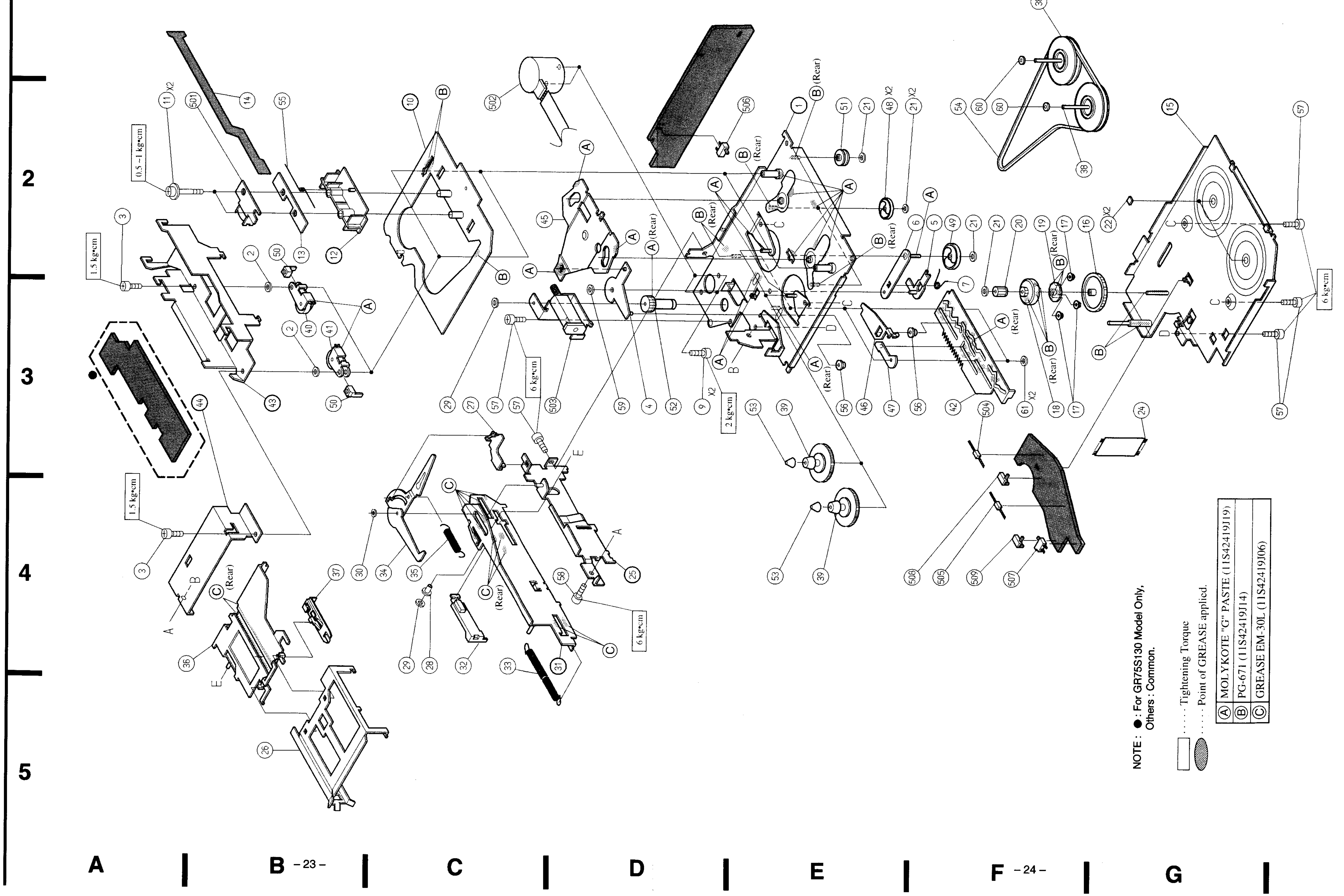
The nosepiece of the gauge must be between the minimum and maximum positions.

(The gauge must be inserted smoothly)

Figure 19

MEMO

Exploded View (Cassette Deck Mechanism)


1
2
3
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5
A
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C
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F
G
0.5 ~1 kg•cm
1.5 kg•cm
1.5 kg•cm
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61 X2
501
502
503
504
505
506
507
508
509
Ⓐ
Ⓑ
Ⓒ
(Rear)
A
B
C
D
E

NOTE : ●: For GR75S130 Model Only,
Others : Common.

▭ ...... Tightening Torque

▨ ...... Point of GREASE applied.

Ⓐ	MOLYKOTE "G" PASTE (11S42419J19)
Ⓑ	PG-671 (11S42419J14)
Ⓒ	GREASE EM-30L (11S42419J06)

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol	No.	Index	Part No.	Description
	2		04B41345P32	Washer, Lock (M3.1)
	3		03S43997P63	Screw, Pan (M1.7 ×4)
	4	3-D	01A71716W01	Assy., Riv. Select Swing
	5	2-F	01A71714W01	Assy., Riv. RF Lever A
	6	2-E	01A71715W01	Assy., Riv. RF Lever B
	7	2-F	41A71781W01	Spring, RF
	9	3-D	03C42723U12	Screw, Cup (M2 ×2.5)
	11		03A80452W01	Screw, F Locks (M2 ×10.7)
	13	2-B	41A31756W01	Spring, Head
○	14	2-B	84T45462W01	Head P.C.Board
●	14	2-B	84T25151W01	Head P.C.Board
	16	2-G	44A71747W01	Gear, Sun
	17		44A71748W01	Gear, Planet
	18	3-F	44A71749W01	Gear, Inner
	19	2-F	44A71751W01	Pinion, Eject Base
	20	2-F	44A71752W01	Pinion, Eject
	21		04B41345P11	Washer, Lock (M1.2)
	22	2-G	43A41656W01	Spacer, UHMW-PE
	24	3-G	30T65174W07	Wire, Flat 10P
	26	5-B	07B71778W01	Holder, Cassette
	27	3-C	45A71736W01	Lever, Pack In Switch
	28	5-C	43A71775W01	Roller, Plate Base
	29		04B41345P01	Washer, Lock (M1.2)
	30	4-B	04B41345P15	Washer, Lock (M1.2)
	32	5-C	44A71753W01	Rack, GR-S
	33	5-C	41A80634W01	Spring, Rack
	34	4-C	01A71720W01	Assy., Riv. Eject Arm A
	35	4-C	41B63283F11	Spring
	36	4-A	01A71712W01	Assy., Riv. Plate Base
	37	3-B	45B71750W01	Slider
	38		01A71783W01	Flywheel
	39		01A71784W01	Reel
	40	3-B	01B81372W01	Assy., Pinch Roller
	41	3-B	01B81372W02	Assy., Pinch Roller
	42	3-F	44B71726W01	Rack, Mode
	45	2-C	45B71729W01	Lever, Select
	46	3-E	45A71737W01	Lever, Mode Switch
	47	3-E	45A71733W01	Lever, Lock
	48	2-E	44A71741W01	Gear, Take Up
	49	2-F	44A71742W01	Gear, RF
	50		43A71743W01	Guide, Pack
	51	2-E	49A71744W01	Pulley, Idler
	52	3-D	44A71746W01	Pinion, Motor
	53		49A71003W01	Reel, Cap
	54	2-F	42A71780W01	Belt

Symbol	No.	Index	Part No.	Description
	55	2-B	41A10387W01	Spring, Pinch Roller
	56		43A71774W01	Roller, Mode
	57		03S44205G30	Screw, Pan (M2.6 ×4)
	58	4-D	03A80629W01	Screw, Special (M2.6 ×6)
	59	3-D	04B41345P02	Washer, Lock (M1.7)
	60	2-F	04S40075G05	Washer, Polyslider (M2.1)
●	or	2-F	04T55449W01	Washer, Teflon
	61	3-F	04B41345P13	Washer, Lock (M1.7)

Miscellaneous

Symbol	No.	Index	Part No.	Description
	501	2-A	88T75612W01	Head
○	502	2-C	01V74500W16	Assy., Main Motor (13.2V-55mA)
●	502	2-C	01V84200W63	Assy., Main Motor (6V-90mA)
	503	3-D	01V74500W23	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-F	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE : ○: For GR75S120 Model Only, ●: For GR75S130 Model Only, Others : Common.

ALPINE®

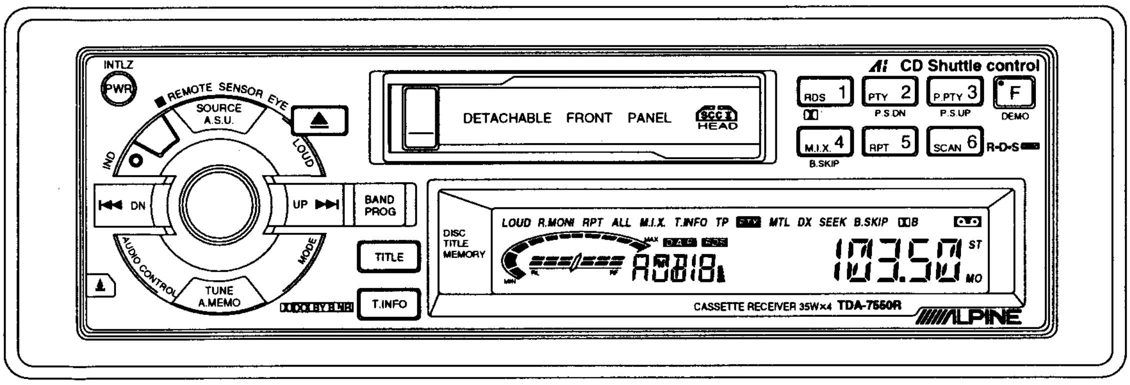
SERVICE MANUAL

FM/MW/LW/RDS Cassette Receiver

CD Shuttle Controller

- REVISED -

- Serial Numbers after No. 70410001.
- The model described in this manual is developed from Model TDA-7550R.
  For information that is not mentioned in this service manual, refer to the Service Manual · TDA-7550R (Part No. 68E23869S01).
- For the cassette deck mechanism parts (GR75S120) of this model, refer to the Service Manual · GR-S Series (Part No. 68E23241S01).


INTLZ
PWR
REMOTE SENSOR EYE
SOURCE A.S.U.
LOUD
IND
DN
UP
BAND PROG
AUDIO CONTROL
MODE
TUNE A.MEMO
TITLE
T.INFO
DETACHABLE FRONT PANEL
SCC HEAD
CD Shuttle control
RDS 1
PTY 2
P.PTY 3
F
P.S DN
P.S UP
DEMO
M.I.X. 4
B.SKIP
RPT 5
SCAN 6
R-D-S
DISC TITLE MEMORY
LOUD R.MONI RPT ALL M.I.X. T.INFO TP MTL DX SEEK B.SKIP
AUDIO
103.50
ST
MO
CASSETTE RECEIVER 35W×4 TDA-7550R
ALPINE

TDA-7550R

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Cabinet Assembly Parts List
Disassembly Instructions
Semi-Conductor Lead Identifications

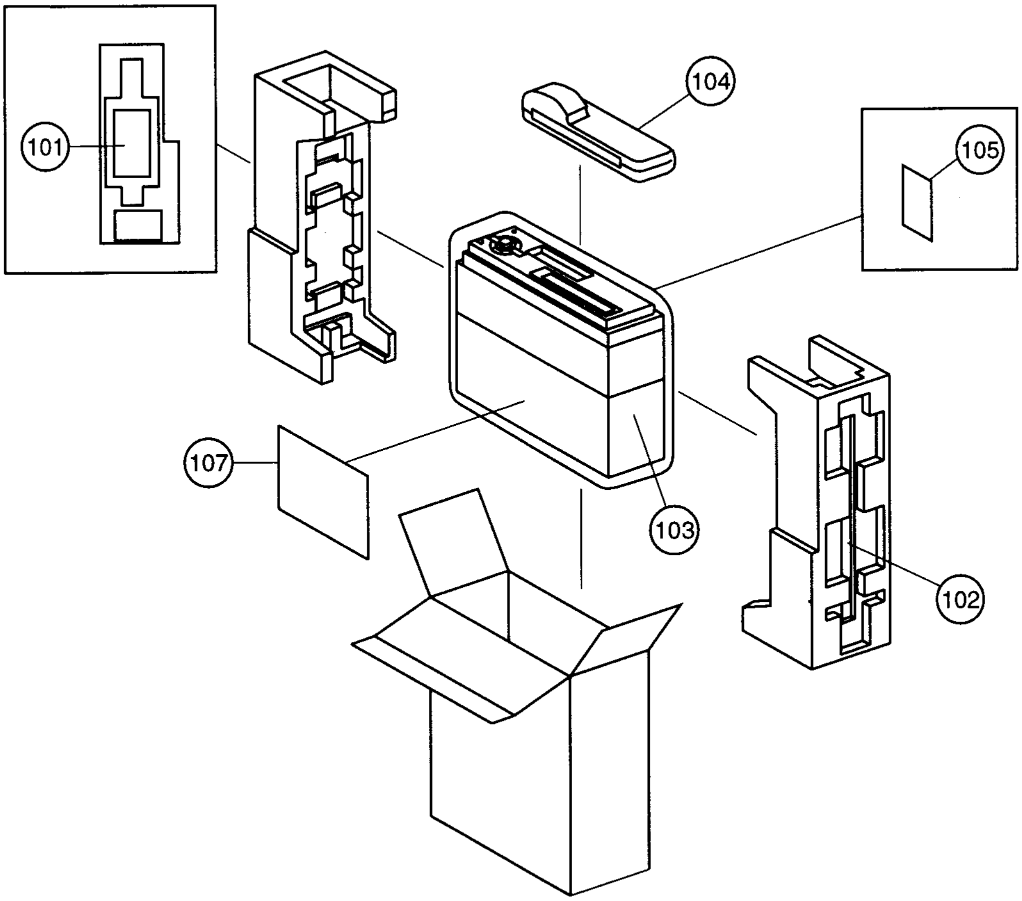
Refer to the Service Manual · TDA-7550R (Part No. 68E23869S01).

Packing Assembly Parts List

NOTE : For the parts not mentioned, refer to the Service Manual for TDA-7550R (Part No. 68E23869S01).

Model	TDA-7550R		TDA-7550R	
Symbol No.	Part No.	Description	Part No.	Description
107	68P80683W20	Owner's Manual	68P81402W53	Owner's Manual

Packing Method View



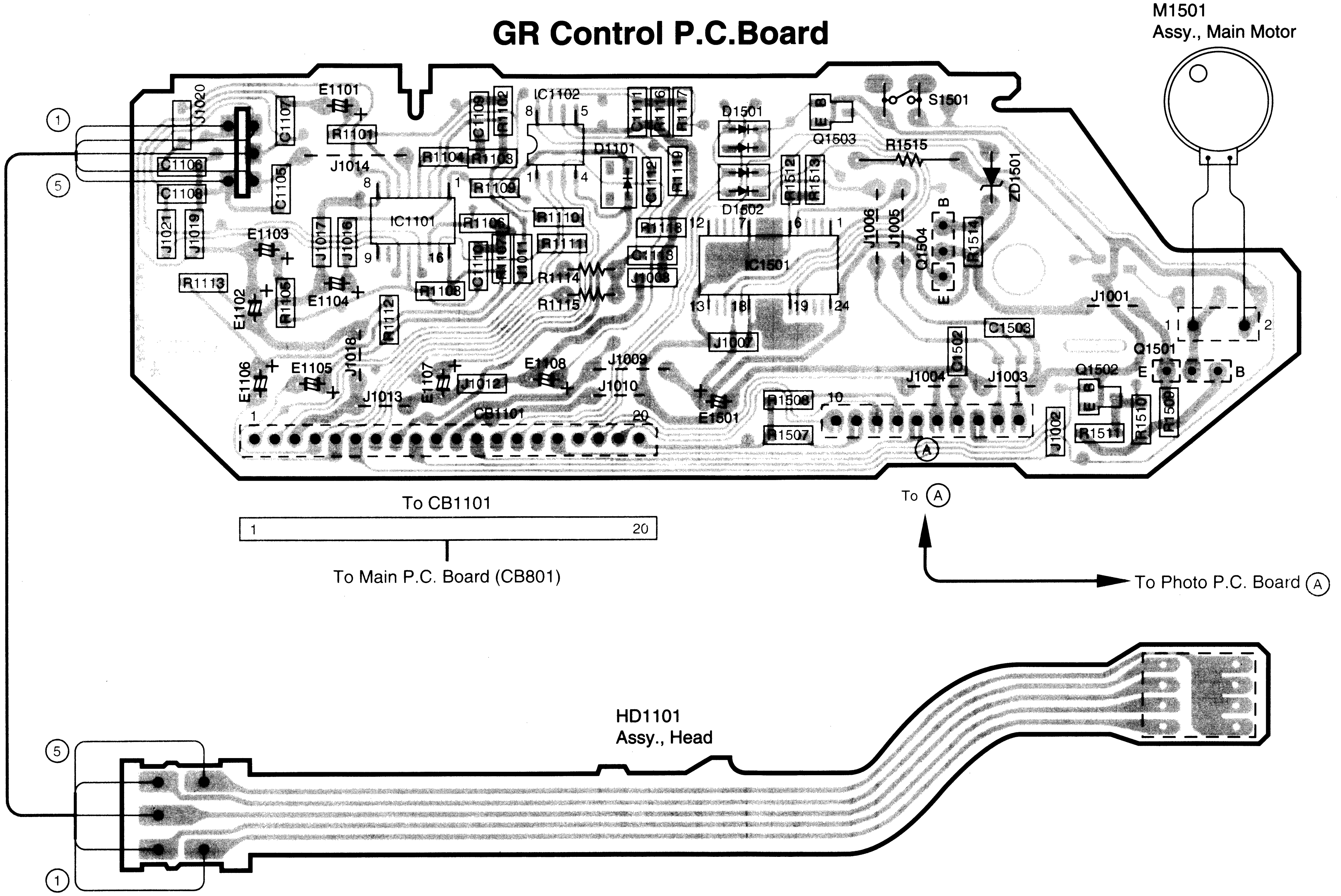
MEMO

Parts Layout on P.C. Boards and Wiring Diagram (3/4)

All P.C. Boards viewed from soldered side.

NOTE: Refer to the Service Manual • TDA-7550R (Part No. 68E23869S01) for description not mentioned in this manual.

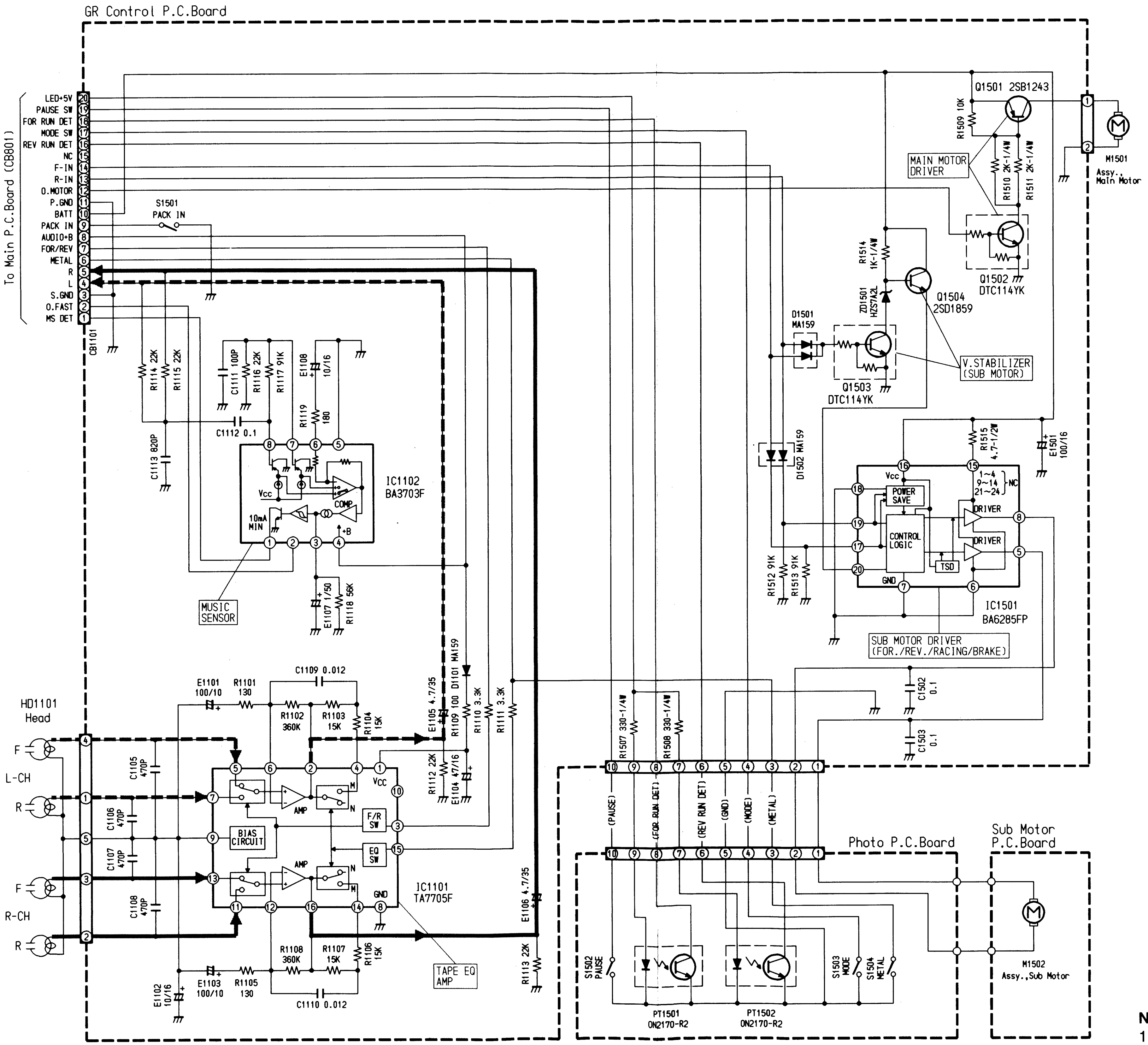
GR Control P.C.Board


M1501
Assy., Main Motor
①
⑤
J1020
C1107
E1101
C1106
C1105
C1108
R1101
J1014
R1104
R1103
R1105
C1109
R1102
IC1102
8
5
1
4
D1101
C1111
R1116
R1117
C1112
R1120
D1501
D1502
Q1503
S1501
R1515
ZD1501
R1512
R1513
J1021
J1019
E1103
J1017
J1016
IC1101
9
16
R1106
R1119
R1111
R1118
C1113
J1008
R1114
R1115
C1110
J1011
IC1501
12
7
6
1
13
18
19
24
J1006
J1005
Q1504
E
B
R1514
R1113
E1102
R1109
E1104
R1108
R1112
J1018
J1007
C1502
C1503
J1001
2
Q1501
Q1502
E1106
E1105
J1013
E1107
J1012
E1108
J1009
J1010
CB1101
20
E1501
R1508
R1507
10
J1004
J1003
J1002
R1511
R1510
R1509
Ⓐ
To Ⓐ
To CB1101
1
20
To Main P.C. Board (CB801)
To Photo P.C. Board Ⓐ
HD1101
Assy., Head
⑤
①

Blue Color Pattern : Foil Side Pattern

Schematic Diagram (6/6)

IC	IC1102 IC1101		IC1501
Transistor (Q,PT)	PT1501	PT1502	Q1503 Q1504 Q1502 Q1501


GR Control P.C.Board
To Main P.C.Board (CB801)
LED+5V
PAUSE SW
FOR RUN DET
MODE SW
REV RUN DET
NC
F-IN
R-IN
O.MOTOR
P.GND
BATT
PACK IN
AUDIO+B
FOR/REV
METAL
R
L
S.GND
O.FAST
MS DET
CB1101
S1501 PACK IN
R1114 22K
R1115 22K
C1111 100P
R1116 22K
R1117 91K
E1108 10/16
R1119 180
C1112 0.1
C1113 820P
IC1102 BA3703F
Vcc
COMP
10mA MIN
+B
MUSIC SENSOR
E1107 1/50
R1118 56K
Q1501 2SB1243
R1509 10K
MAIN MOTOR DRIVER
R1510 2K-1/4W
R1511 2K-1/4W
M1501 Assy., Main Motor
R1514 1K-1/4W
ZD1501 HZS7A2L
Q1504 2SD1859
Q1502 DTC114YK
D1501 MA159
Q1503 DTC114YK
V.STABILIZER (SUB MOTOR)
D1502 MA159
R1515 4.7-1/2W
E1501 100/16
POWER SAVE
CONTROL LOGIC
DRIVER
TSD
GND
1~4 9~14 21~24 NC
R1512 91K
R1513 91K
IC1501 BA6285FP
SUB MOTOR DRIVER (FOR./REV./RACING/BRAKE)
HD1101 Head
L-CH
R-CH
F
R
E1101 100/10
R1101 130
C1109 0.012
R1102 360K
R1103 15K
R1104 15K
E1105 4.7/35
R1109 100
D1101 MA159
R1110 3.3K
R1111 3.3K
C1105 470P
C1106 470P
C1107 470P
C1108 470P
AMP
BIAS CIRCUIT
F/R SW
EQ SW
Vcc
GND
R1112 22K
E1104 47/16
IC1101 TA7705F
TAPE EQ AMP
E1106 4.7/35
R1113 22K
R1108 360K
R1107 15K
R1106 15K
E1102 10/16
E1103 100/10
R1105 130
C1110 0.012
R1507 330-1/4W
R1508 330-1/4W
C1502 0.1
C1503 0.1
(PAUSE)
(FOR RUN DET)
(REV RUN DET)
(GND)
(MODE)
(METAL)
Photo P.C.Board
Sub Motor P.C.Board
S1502 PAUSE
PT1501 ON2170-R2
PT1502 ON2170-R2
S1503 MODE
S1504 METAL
M1502 Assy.,Sub Motor

NOTE:
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. P = $\frac{1}{1,000,000}$

Electrical Parts List

NOTE : For the parts not mentioned, refer to the Service Manual for TDA-7550R (Part No. 68E23869S01).

Model	TDA-7550R		TDA-7550R	
Symbol No.	Part No.	Description	Part No.	Description
Main P.C.Board				
IC's				
IC501	51T85151W08	85151W08	51T85180W03	85180W03
IC502	51T85088W01	85088W01	51T85088W02	85088W02
Buzzer				
BPF001	91T75257W01	Filter, LPF11830K	91T75257W02	Filter, LPF11830KH
Front P.C.Board				
Switches				
S401	40T55656W03	Tact, CP. SKQMAJ (INTLZ/PWR)	40T55656W06	Tact, CP. SKQMAJ (INTLZ/PWR)
S405	40T55656W03	Tact, CP. SKQMAJ (REW/DN)	40T55656W06	Tact, CP. SKQMAJ (REW/DN)
S406	40T55656W03	Tact, CP. SKQMAJ (FF/UP)	40T55656W06	Tact, CP. SKQMAJ (FF/UP)
S408	40T55656W03	Tact, CP. SKQMAJ (BAND/PROG)	40T55656W06	Tact, CP. SKQMAJ (BAND/PROG)
S411	40T55656W03	Tact, CP. SKQMAJ (RDS/1/DOLBY)	40T55656W06	Tact, CP. SKQMAJ (RDS/1/DOLBY)
S412	40T55656W03	Tact, CP. SKQMAJ (PTY/2/P.S. DN)	40T55656W06	Tact, CP. SKQMAJ (PTY/2/P.S. DN)
S413	40T55656W03	Tact, CP. SKQMAJ (P.PTY/3/P.S. UP)	40T55656W06	Tact, CP. SKQMAJ (P.PTY/3/P.S. UP)
S414	40T55656W03	Tact, CP. SKQMAJ (M.I.X./4/B.SKIP)	40T55656W06	Tact, CP. SKQMAJ (M.I.X./4/B.SKIP)
S415	40T55656W03	Tact, CP. SKQMAJ (RPT/5)	40T55656W06	Tact, CP. SKQMAJ (RPT/5)
S416	40T55656W03	Tact, CP. SKQMAJ (SCAN/6)	40T55656W06	Tact, CP. SKQMAJ (SCAN/6)
S417	40T55656W03	Tact, CP. SKQMAJ (F/DEMO)	40T55656W06	Tact, CP. SKQMAJ (F/DEMO)
GR Control P.C.Board				
Capacitors				
C1501	08S65128F76	CP., 0.1μF	—	—
C1502	—	—	08S65128F76	CP., 0.1μF
C1503	—	—	08S65128F76	CP., 0.1μF
Resistors		(All resistors are chip 1/10W±5% unless otherwise noted.)		
R1103	06S64995F80	13K ohm	06S64995F81	15K ohm
R1104	06S53330F80	13K ohm 1/8W	06S53330F81	15K ohm 1/8W

Model Symbol No.	TDA-7550R Part No.	TDA-7550R Description	TDA-7550R Part No.	TDA-7550R Description
R1106	06S64995F80	13K ohm	06S64995F81	15K ohm
R1107	06S64995F80	13K ohm	06S64995F81	15K ohm
R1119	06S64995F32	130 ohm	06S64995F35	180 ohm
Miscellaneous				
CB501	09T75038W16	16P Connector	09T85354W16	16P Connector
CH401	09T75039W16	16P Connector	09T85353W16	16P Connector

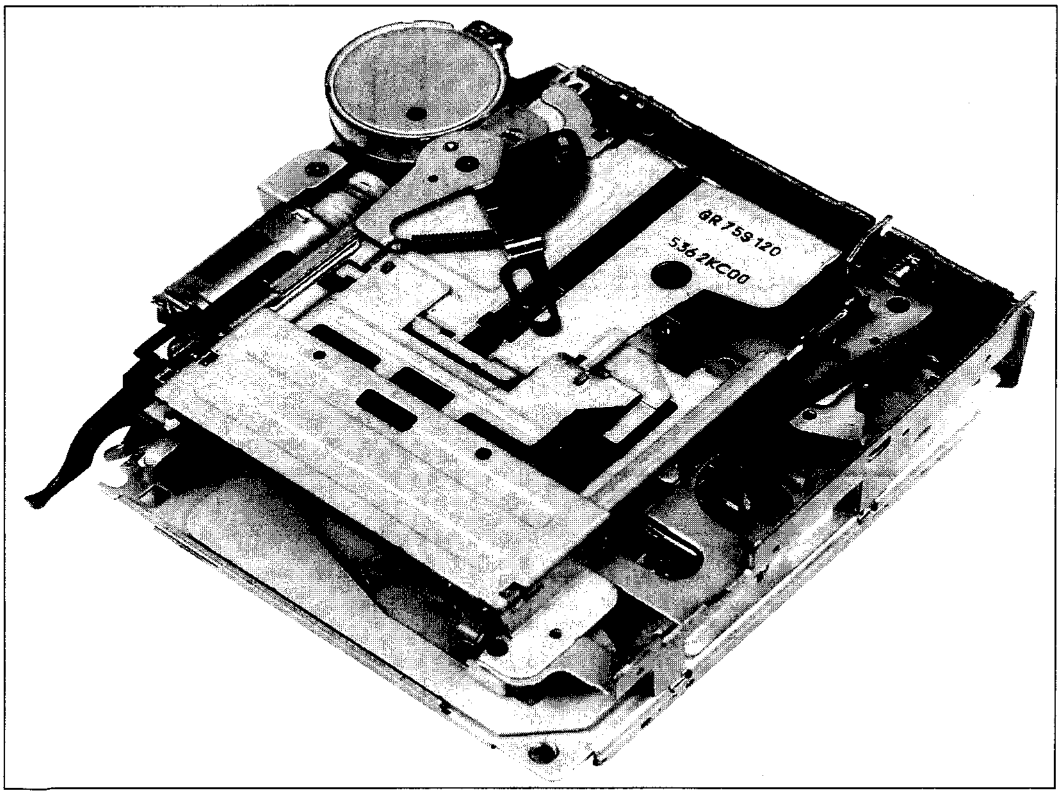
ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED

- This manual is described on GR75S310 only. The GR75S310 is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E23241S01).
- 当マニュアルはGR75S310についてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E23241S01) を参照願います。



GR-S SERIES

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Cassette Deck Mechanism Assembly Parts List (Only Difference) 2
Exploded View (Cassette Deck Mechanism) .... 3 to 4

Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts
} Refer to the Service Manual・GR-S SERIES (Part No. 68E23241S01).

NOTE : Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE: The parts is not mentioned, refer to the Service Manual・DR-S SERIES (Part No.68E23241S01).

Symbol No.	Index	Part No.	Description
4	3-D	01A90342W01	Assy., Riv. Select Swing
5	2-F	01A90340W01	Assy., Riv. RF Lever A
6	2-F	01A90341W01	Assy., Riv. RF Lever B
11	2-A	03A80452W02	Screw, F Locks (M2X10.7)
13	2-B	41A31756W02	Spring, Head
26	5-B	07B40012W02	Holder, Cassette
27	3-C	45A71736W02	Lever, Pack In Switch
34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)
36	4-A	01A90338W01	Assy., Riv. Plate Base
38		01A90350W01	Assy., Flywheel
40	3-B	01B30863W01	Assy., Pinch Roller
41	3-B	01B30863W02	Assy., Pinch Roller
42	3-F	44B90318W01	Rack, Mode

Symbol No.	Index	Part No.	Description
45	2-C	45B90320W01	Lever, Select
46	3-E	45A71737W02	Lever, Mode Switch
47	3-E	45A71733W02	Lever, Lock
53		49A81855W01	Reel, Cap
54	2-F	42A71780W02	Belt
55	2-B	41A10387W02	Spring, Pinch Roller
62	3-B	45A90322W01	Lever, Eject Arm A
Miscellaneous			
501	2-B	88T95215W02	Head
503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)

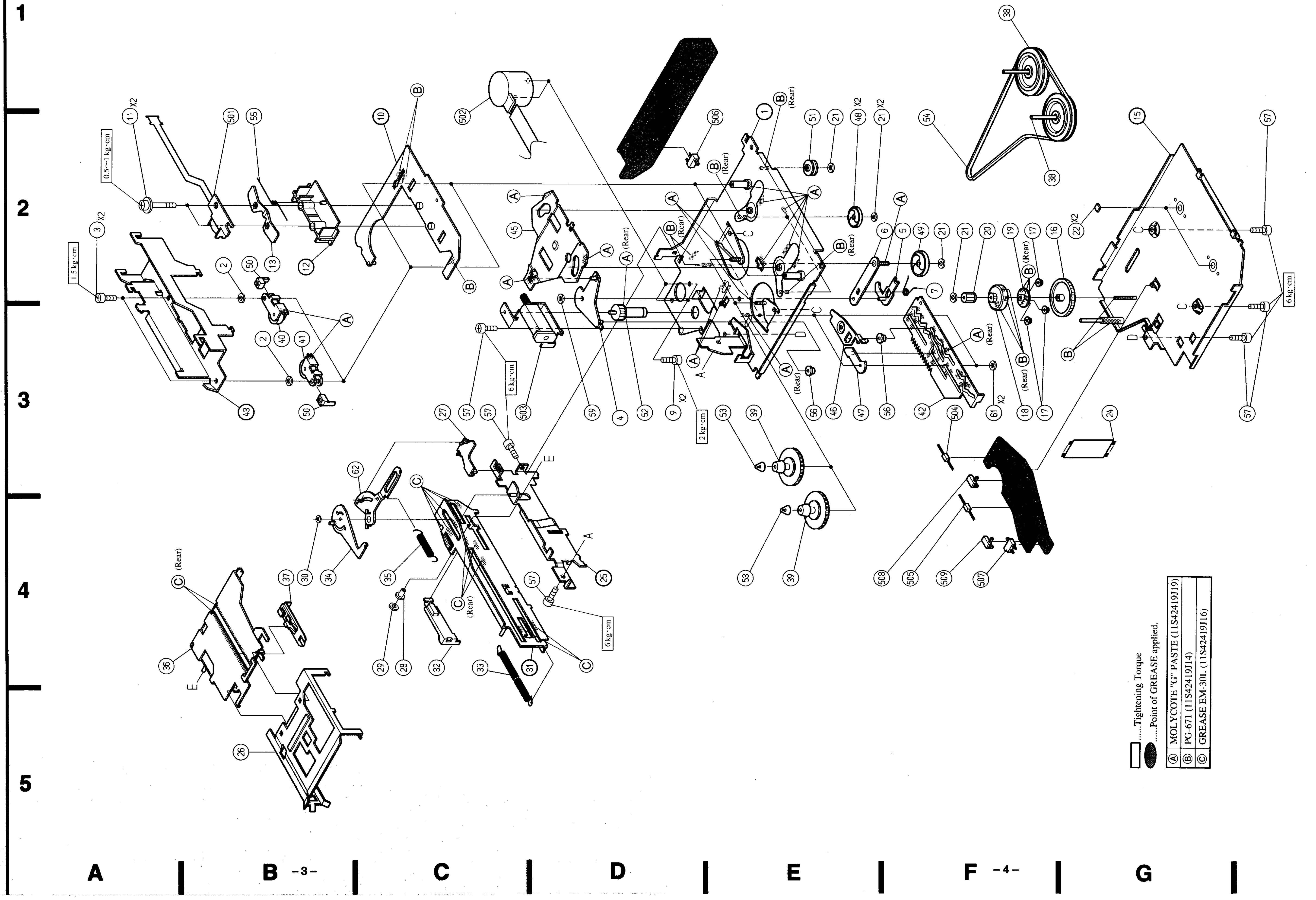
カセットデッキメカニズム関係部品表

※ 記載されていない部品については、サービスマニュアル・GR-S SERIES (68E23241S01) を参照願います。

記号	索引	部品番号	部品名	標準卸価格
4	3-D	01A90342W01	Assy., Riv. Select Swing	—
5	2-F	01A90340W01	Assy., Riv. RF Lever A	—
6	2-F	01A90341W01	Assy., Riv. RF Lever B	—
11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
13	2-B	41A31756W02	Spring, Head	60
26	5-B	07B40012W02	Holder, Cassette	260
27	3-C	45A71736W02	Lever, Pack In Switch	—
34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)	—
36	4-A	01A90338W01	Assy., Riv. Plate Base	—
38		01A90350W01	Assy., Flywheel	—
40	3-B	01B30863W01	Assy., Pinch Roller	240
41	3-B	01B30863W02	Assy., Pinch Roller	240
42	3-F	44B90318W01	Rack, Mode	—

記号	索引	部品番号	部品名	標準卸価格
45	2-C	45B90320W01	Lever, Select	—
46	3-E	45A71737W02	Lever, Mode Switch	—
47	3-E	45A71733W02	Lever, Lock	—
53		49A81855W01	Reel, Cap	45
54	2-F	42A71780W02	Belt	—
55	2-B	41A10387W02	Spring, Pinch Roller	—
62	3-B	45A90322W01	Lever, Eject Arm A	—
その他の電気部品				
501	2-B	88T95215W02	Head	1,210
503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)	1,440

Exploded View (Cassette Deck Mechanism)


1
2
3
4
5
A
B
C
D
E
F
G
501
55
11 X2
0.5~1 kg·cm
10
B
502
506
1
B (Rear)
51
21
48 X2
21 X2
54
38
38
15
57
3 X2
1.5 kg·cm
2
50
13
12
43
40
41
2
50
A
45
A
A
A (Rear)
B (Rear)
B (Rear)
B (Rear)
A
6
5
49
21
21
20
19
B (Rear)
17
16
22 X2
7
6 kg·cm
57
57
503
59
4
52
9 X2
2 kg·cm
53
39
56
46
47
56
42
A (Rear)
61 X2
18
B (Rear)
17
504
24
57
27
62
C
E
A
25
30
34
35
37
36
C (Rear)
E
29
28
32
C (Rear)
33
31
C
57
6 kg·cm
26
53
39
508
505
509
507
C
D

▭ ......Tightening Torque

● ......Point of GREASE applied.

Ⓐ	MOLYCOTE "G" PASTE (11S42419J19)
Ⓑ	PG-671 (11S42419J14)
Ⓒ	GREASE EM-30L (11S42419J16)

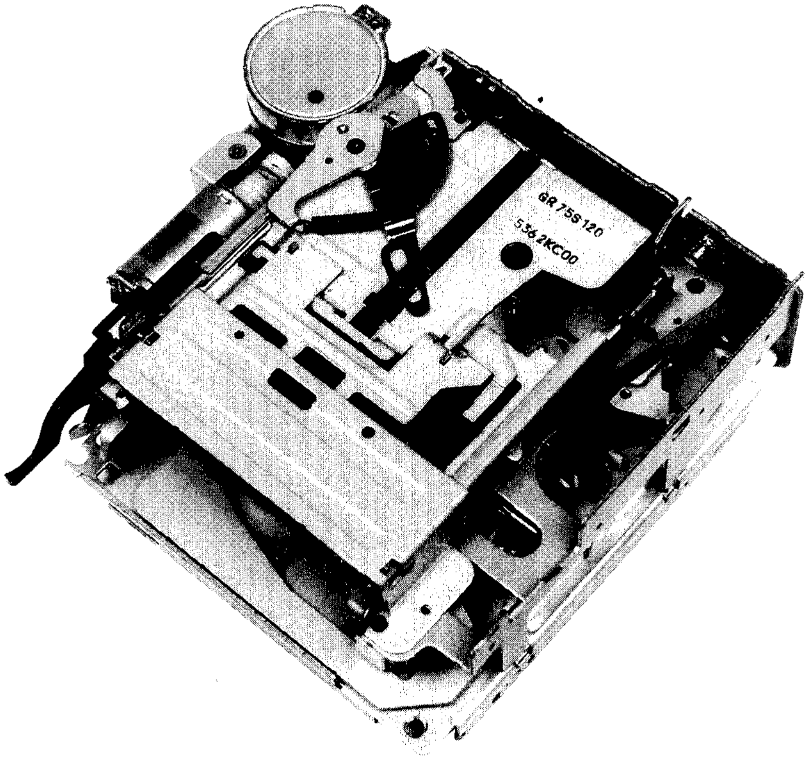
ALPINE

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (II)

- This manual is described on GR75S410/42Y only. The GR75S410/42Y is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E23241S01).
- 当マニュアルはGR75S410/42Yについてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E23241S01) を参照願います。



GR-S SERIES

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Exploded View (Cassette Deck Mechanism) .... 5 to 6

Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts

Refer to the Service Manual ·
GR-S SERIES
(Part No. 68E23241S01).

NOTE: Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
	2		04B41345P32	Washer, Lock (M3.1)
	3		03S43997P63	Screw, Pan (M1.7X4)
	4	3-D	01A90342W02	Assy., Riv. Select Swing
	5	2-F	01A71714W01	Assy., Riv. RF Lever A
	6	2-E	01A90341W02	Assy., Riv. RF Lever B
	7	2-F	41A71781W01	Spring, RF
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)
	13	2-B	41A31756W01	Spring, Head
	16	2-F	44A71747W01	Gear, Sun
	17		44A71748W01	Gear, Planet
	18	3-F	44A71749W01	Gear, Inner
	19	2-F	44A71751W01	Pinion, Eject Base
	20	2-F	44A71752W01	Pinion, Eject
	21		04B41345P11	Washer, Lock (M1.2)
	22	2-G	43A41656W01	Spacer, UHMW-PE
	24	3-G	30T65174W07	Wire, Flat 10P
	26	5-B	07B71778W01	Holder, Cassette
	27	3-C	45A71736W03	Lever, Pack In Switch
	28	4-C	43A71775W01	Roller, Plate Base
	29	4-C	04B41345P01	Washer, Lock (M1.2)
	30	4-B	04B41345P15	Washer, Lock (M1.2)
	32	4-C	44A71753W01	Rack, GR-S
	33	4-C	41A80634W01	Spring, Rack
	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)
	35	4-C	41B63283F11	Spring
	36	4-A	01A71712W01	Assy., Riv. Plate Base
	37	4-B	45B71750W01	Slider
○	38		01A90350W01	Assy., Flywheel
●	38		01A71783W10	Assy., Flywheel
	39		01A71784W01	Reel
	40	3-B	01B30863W01	Assy., Pinch Roller
	41	3-B	01B30863W02	Assy., Pinch Roller
	42	3-F	44B71726W01	Rack, Mode
	45	2-C	45B90320W02	Lever, Select
	46	3-E	45A71737W03	Lever, Mode Switch
	47	3-E	45A71733W03	Lever, Lock
	48	2-E	44A71741W01	Gear, Take Up
	49	2-F	44A71742W01	Gear, RF
	50		43A71743W01	Guide, Pack
	51	2-E	49A71744W01	Pulley, Idler
	52	3-D	44A71746W01	Pinion, Motor
	53		49A81855W01	Reel, Cap
	54	2-F	42A71780W02	Belt
	55	2-B	41A10387W02	Spring, Pinch Roller
	56	3-E	43A71774W01	Roller, Mode

Symbol No.		Index	Part No.	Description
	57		03S44205G30	Screw, Pan (M2.6X4)
●	58	4-D	03A80629W01	Screw, Special (M2.6X6)
	59	3-D	04B41345P02	Washer, Lock (M1.7)
●	60	2-F	04S40075G05	Washer, Polyslider (M2.1)
●	or	2-F	04T55449W01	Washer, Polyslider (M2.1)
	61	3-F	04B41345P23	Washer, Lock (M1.7)
	62	3-B	45A90322W02	Lever, Eject Arm A

Miscellaneous

Symbol No.		Index	Part No.	Description
○	501	2-B	88T95215W02	Head
●	501	2-B	88T75612W03	Head
○	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)
●	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)
	503	3-C	01V74500W23	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-E	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE : ○: For GR75S410 Model Only, ●: For GR75S42Y Model Only, Others : Common.

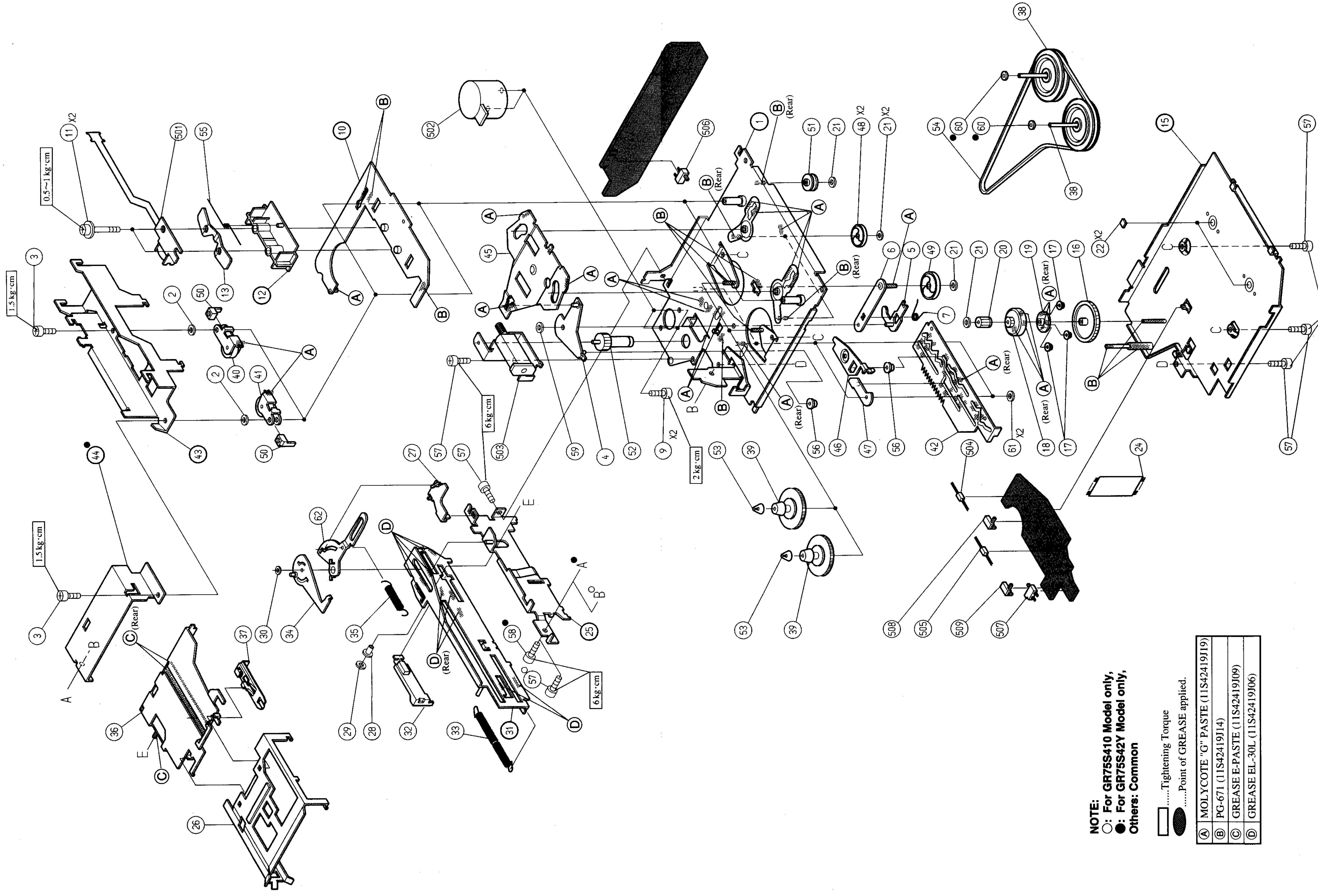
カセットデッキメカニズム関係部品表

※ 部品表に記入されていない部品は供給されません。

	記号	索引	部品番号	部品名	標準卸価格
	2		04B41345P32	Washer, Lock (M3.1)	45
	3		03S43997P63	Screw, Pan (M1.7X4)	45
	4	3-D	01A90342W02	Assy., Riv. Select Swing	—
	5	2-F	01A71714W01	Assy., Riv. RF Lever A	120
	6	2-E	01A90341W02	Assy., Riv. RF Lever B	—
	7	2-F	41A71781W01	Spring, RF	45
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)	45
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
	13	2-B	41A31756W01	Spring, Head	60
	16	2-F	44A71747W01	Gear, Sun	50
	17		44A71748W01	Gear, Planet	45
	18	3-F	44A71749W01	Gear, Inner	—
	19	2-F	44A71751W01	Pinion, Eject Base	100
	20	2-F	44A71752W01	Pinion, Eject	90
	21		04B41345P11	Washer, Lock (M1.2)	45
	22	2-G	43A41656W01	Spacer, UHMW-PE	45
	24	3-G	30T65174W07	Wire, Flat 10P	160
	26	5-B	07B71778W01	Holder, Cassette	240
	27	3-C	45A71736W03	Lever, Pack In Switch	—
	28	4-C	43A71775W01	Roller, Plate Base	50
	29	4-C	04B41345P01	Washer, Lock (M1.2)	45
	30	4-B	04B41345P15	Washer, Lock (M1.2)	45
	32	4-C	44A71753W01	Rack, GR-S	130
	33	4-C	41A80634W01	Spring, Rack	80
	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)	—
	35	4-C	41B63283F11	Spring	45
	36	4-A	01A71712W01	Assy., Riv. Plate Base	260
	37	4-B	45B71750W01	Slider	45
○	38		01A90350W01	Assy., Flywheel	380
●	38		01A71783W10	Assy., Flywheel	450
	39		01A71784W01	Reel	370
	40	3-B	01B30863W01	Assy., Pinch Roller	240
	41	3-B	01B30863W02	Assy., Pinch Roller	240
	42	3-F	44B71726W01	Rack, Mode	120
	45	2-C	45B90320W02	Lever, Select	—
	46	3-E	45A71737W03	Lever, Mode Switch	—
	47	3-E	45A71733W03	Lever, Lock	—
	48	2-E	44A71741W01	Gear, Take Up	45
	49	2-F	44A71742W01	Gear, RF	45
	50		43A71743W01	Guide, Pack	45
	51	2-E	49A71744W01	Pulley, Idler	45
	52	3-D	44A71746W01	Pinion, Motor	60
	53		49A81855W01	Reel, Cap	45
	54	2-F	42A71780W02	Belt	140
	55	2-B	41A10387W02	Spring, Pinch Roller	45
	56	3-E	43A71774W01	Roller, Mode	50
	57		03S44205G30	Screw, Pan (M2.6X4)	45
●	58	4-D	03A80629W01	Screw, Special (M2.6X6)	50
	59	3-D	04B41345P02	Washer, Lock (M1.7)	45
●	60	2-F	04S40075G05	Washer, Polyslider (M2.1)	45
●	or	2-F	04T55449W01	Washer, Polyslider (M2.1)	45
	61	3-F	04B41345P23	Washer, Lock (M1.7)	45
	62	3-B	45A90322W02	Lever, Eject Arm A	—
	その他の電気部品				
○	501	2-B	88T95215W02	Head	1,210
●	501	2-B	88T75612W03	Head	1,240
○	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)	1,460
●	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)	1,480
	503	3-C	01V74500W23	Assy., Sub Motor (7V-370mA)	1,500
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2	310
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2	310
	506	2-D	40T15222W01	Switch, Detector (PACK IN)	130
	507	4-F	40T15382W02	Switch, Detector (PAUSE)	130
	508	4-E	40T15382W02	Switch, Detector (MODE)	130
	509	4-F	40T15382W02	Switch, Detector (METAL)	130

注記：○：GR75S410 モデル専用, ●：GR75S42Y モデル専用, その他：共通

Exploded View (Cassette Deck Mechanism)


1
2
3
4
5
A
B
C
D
E
F
G
0.5~1 kg·cm
11 X2
501
55
13
12
10
B
A
1.5 kg·cm
3
2
50
40
41
2
50
43
44
1.5 kg·cm
3
B (Rear)
C
A
B
36
E
C
37
26
502
506
45
503
57
57
6 kg·cm
59
4
52
9
X2
2 kg·cm
1
B (Rear)
B (Rear)
51
21
48 X2
21 X2
6
5
49
21
21
20
19
17
A (Rear)
16
7
46
47
56
56 (Rear)
42
A (Rear)
61 X2
18 (Rear)
17
53
39
53
39
504
24
508
505
509
507
54
60
60
38
38
15
22 X2
57
6 kg·cm
57
C
D
27
62
D
34
30
35
29
28
32
D (Rear)
58
57
6 kg·cm
D
31
33
25
E
A
B

NOTE:
○: **For GR75S410 Model only,**
●: **For GR75S42Y Model only,**
Others: Common

□ ......Tightening Torque
⬬ ......Point of GREASE applied.

Ⓐ	MOLYCOTE "G" PASTE (11S42419J19)
Ⓑ	PG-671 (11S42419J14)
Ⓒ	GREASE E-PASTE (11S42419J09)
Ⓓ	GREASE EL-30L (11S42419J06)

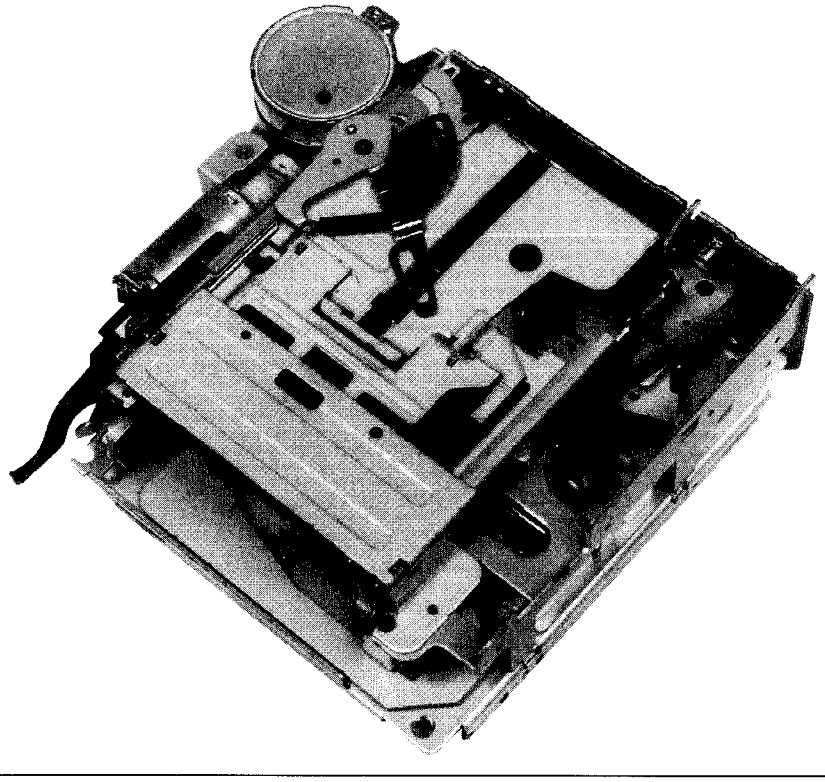
ALPINE®

SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (III)

- This manual is described on GR75S22H/42H only. The GR75S22H/42H is developed from GR-S SERIES. For information that is not mentioned in this service manual, refer to the Service Manual • GR-S SERIES (68E26177S01).
- 当マニュアルはGR75S22H/42Hについてのみ記載しております。又、GR-S SERIESがベースモデルとなっておりますので、相違部分のみ記載しております。詳細についてはGR-S SERIES (68E26177S01) を参照願います。



GR-S SERIES

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Basic Operation of GR-S Mechanism
Disassembly, Assembly and Replacement of Function Parts

Refer to the Service Manual · GR-S SERIES (Part No. 68E23241S01).

NOTE: Due to continuing product improvement, specifications and designs are subject to change without notice.

Cassette Deck Mechanism Assembly Parts List

NOTE:No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
	2		04B41345P32	Washer, Lock (M3.1)
	3		03S43997P63	Screw, Pan (M1.7X4)
○	4	3-D	01A90342W01	Assy., Riv. Select Swing
●	4	3-D	01A90342W02	Assy., Riv. Select Swing
○	5	2-F	01A90340W01	Assy., Riv. RF Lever A
●	5	2-F	01A71714W01	Assy., Riv. RF Lever A
○	6	2-E	01A90341W01	Assy., Riv. RF Lever B
●	6	2-E	01A90341W02	Assy., Riv. RF Lever B
	7	2-F	41A71781W01	Spring, RF
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)
	13	2-B	41A31756W01	Spring, Head
	16	2-F	44A71747W01	Gear, Sun
	17		44A71748W01	Gear, Planet
	18	3-F	44A71749W01	Gear, Inner
	19	2-F	44A71751W01	Pinion, Eject Base
	20	2-F	44A71752W01	Pinion, Eject
	21		04B41345P11	Washer, Lock (M1.2)
	22	2-G	43A41656W01	Spacer, UHMW-PE
	24	3-G	30T65174W07	Wire, Flat 10P
○	26	5-C	07B40012W01	Holder, Cassette
●	26	5-B	07B71778W01	Holder, Cassette
○	27	3-C	45A71736W02	Lever, Pack In Switch
●	27	3-C	45A71736W03	Lever, Pack In Switch
	28	4-C	43A71775W01	Roller, Plate Base
	29	4-C	04B41345P01	Washer, Lock (M1.2)
	30	4-B	04B41345P15	Washer, Lock (M1.2)
	32	4-C	44A71753W01	Rack, GR-S
	33	4-C	41A80634W01	Spring, Rack
○	34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)
●	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)
	35	4-C	41B63283F11	Spring
○	36	4-A	01A40024W03	Assy., Riv. Plate Base
●	36	4-A	01A71712W01	Assy., Riv. Plate Base
	37	4-B	45B71750W01	Slider
	38		01A90350W01	Assy., Flywheel
	39		01A71784W01	Reel
	40	3-B	01B30863W01	Assy., Pinch Roller
	41	3-B	01B30863W02	Assy., Pinch Roller
○	42	3-F	44B90318W01	Rack, Mode B
●	42	3-F	44B71726W01	Rack, Mode
○	45	2-C	45B90320W01	Lever, Select
●	45	2-C	45B90320W02	Lever, Select
○	46	3-E	45A71737W02	Lever, Mode Switch
●	46	3-E	45A71737W03	Lever, Mode Switch
○	47	3-E	45A71733W02	Lever, Lock

Symbol No.		Index	Part No.	Description
●	47	3-E	45A71733W03	Lever, Lock
	48	2-E	44A71741W01	Gear, Take Up
	49	2-F	44A71742W01	Gear, RF
	50		43A71743W01	Guide, Pack
	51	2-E	49A71744W01	Pulley, Idler
	52	3-D	44A71746W01	Pinion, Motor
	53		49A81855W01	Reel, Cap
	54	2-F	42A71780W02	Belt
	55	2-B	41A10387W02	Spring, Pinch Roller
	56		43A71774W01	Roller, Mode
	57		03S44205G30	Screw, Pan (M2.6X4)
	58	4-D	03A80629W01	Screw, Special (M2.6X6)
	59	3-D	04B41345P02	Washer, Lock (M1.7)
	61	3-F	04B41345P23	Washer, Lock (M1.7)
○	62	3-B	45A90322W01	Lever, Eject Arm A
●	62	3-B	45A90322W02	Lever, Eject Arm A

Miscellaneous

Symbol No.		Index	Part No.	Description
	501	2-B	88T75612W03	Head
○	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)
●	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)
○	503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)
●	503	3-C	01V11700Y92	Assy., Sub Motor (7V-370mA)
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2
	506	2-D	40T15222W01	Switch, Detector (PACK IN)
	507	4-F	40T15382W02	Switch, Detector (PAUSE)
	508	4-E	40T15382W02	Switch, Detector (MODE)
	509	4-F	40T15382W02	Switch, Detector (METAL)

NOTE: ○: For GR75S22H Model Only, ●: For GR75S42H Model Only, Others: Common.

カセット・デッキ・メカニズム関係部品表

※ 部品表に記入されていない部品は供給されません。

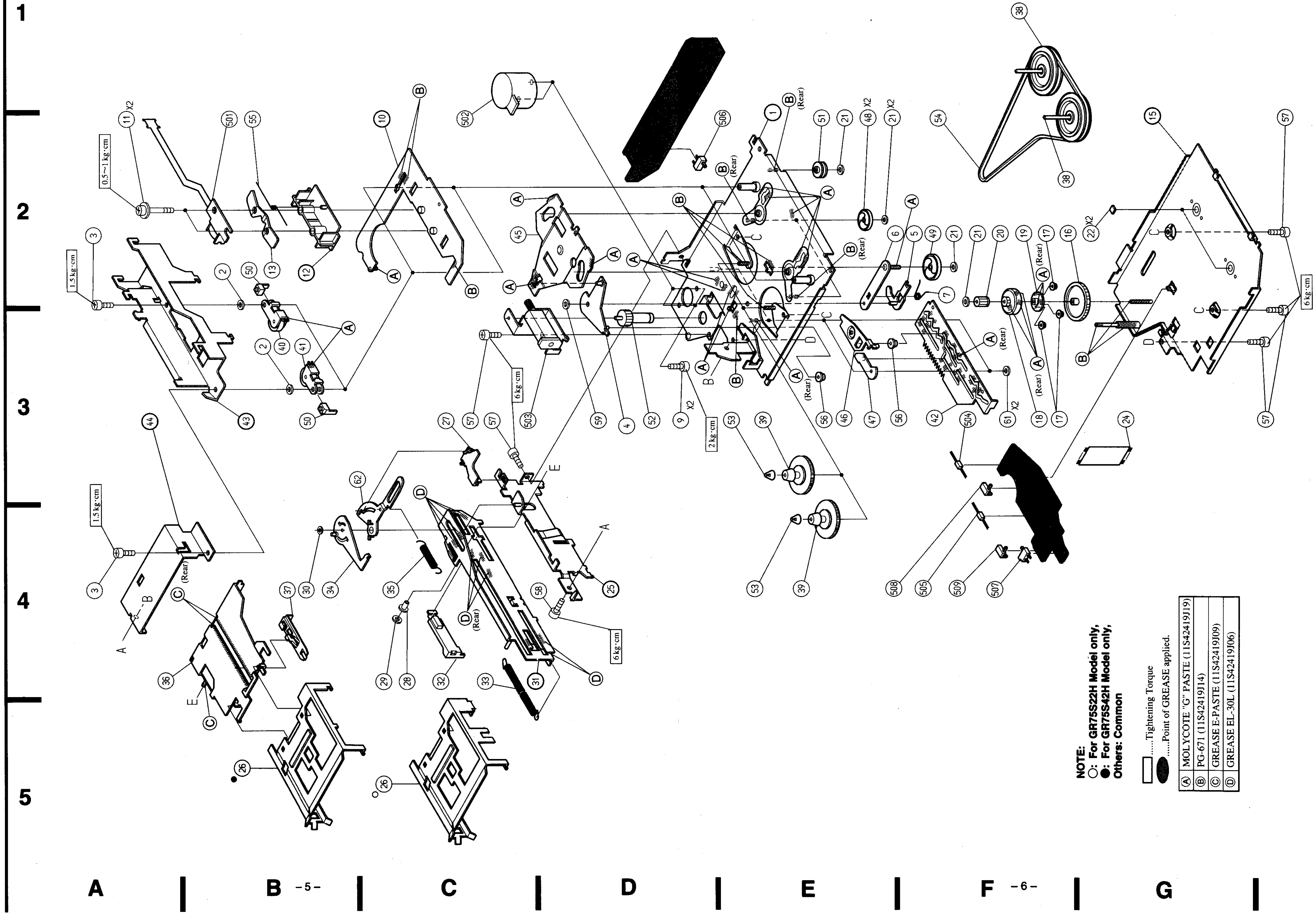
記号		索引	部品番号	部品名	標準卸価格
	2		04B41345P32	Washer, Lock (M3.1)	45
	3		03S43997P63	Screw, Pan (M1.7X4)	45
○	4	3-D	01A90342W01	Assy., Riv. Select Swing	—
●	4	3-D	01A90342W02	Assy., Riv. Select Swing	—
○	5	2-F	01A90340W01	Assy., Riv. RF Lever A	160
●	5	2-F	01A71714W01	Assy., Riv. RF Lever A	120
○	6	2-E	01A90341W01	Assy., Riv. RF Lever B	—
●	6	2-E	01A90341W02	Assy., Riv. RF Lever B	—
	7	2-F	41A71781W01	Spring, RF	45
	9	3-D	03C42723U12	Screw, Cup (M2X2.5)	45
	11	2-A	03A80452W02	Screw, F Locks (M2X10.7)	45
	13	2-B	41A31756W01	Spring, Head	60
	16	2-F	44A71747W01	Gear, Sun	50
	17		44A71748W01	Gear, Planet	45
	18	3-F	44A71749W01	Gear, Inner	—
	19	2-F	44A71751W01	Pinion, Eject Base	100
	20	2-F	44A71752W01	Pinion, Eject	90
	21		04B41345P11	Washer, Lock (M1.2)	45
	22	2-G	43A41656W01	Spacer, UHMW-PE	45
	24	3-G	30T65174W07	Wire, Flat 10P	160
○	26	5-C	07B40012W01	Holder, Cassette	280
●	26	5-B	07B71778W01	Holder, Cassette	240
○	27	3-C	45A71736W02	Lever, Pack In Switch	—
●	27	3-C	45A71736W03	Lever, Pack In Switch	—
	28	4-C	43A71775W01	Roller, Plate Base	50
	29	4-C	04B41345P01	Washer, Lock (M1.2)	45
	30	4-B	04B41345P15	Washer, Lock (M1.2)	45
	32	4-C	44A71753W01	Rack, GR-S	130
	33	4-C	41A80634W01	Spring, Rack	80
○	34	4-B	01A90346W01	Assy., Riv. Eject Arm (B)	—
●	34	4-B	01A90346W02	Assy., Riv. Eject Arm (B)	—
	35	4-C	41B63283F11	Spring	45
○	36	4-A	01A40024W03	Assy., Riv. Plate Base	240
●	36	4-A	01A71712W01	Assy., Riv. Plate Base	260
	37	4-B	45B71750W01	Slider	45
	38		01A90350W01	Assy., Flywheel	380
	39		01A71784W01	Reel	370
	40	3-B	01B30863W01	Assy., Pinch Roller	240
	41	3-B	01B30863W02	Assy., Pinch Roller	240
○	42	3-F	44B90318W01	Rack, Mode B	160
●	42	3-F	44B71726W01	Rack, Mode	120
○	45	2-C	45B90320W01	Lever, Select	—
●	45	2-C	45B90320W02	Lever, Select	—
○	46	3-E	45A71737W02	Lever, Mode Switch	—
●	46	3-E	45A71737W03	Lever, Mode Switch	—
○	47	3-E	45A71733W02	Lever, Lock	—
●	47	3-E	45A71733W03	Lever, Lock	—
	48	2-E	44A71741W01	Gear, Take Up	45
	49	2-F	44A71742W01	Gear, RF	45
	50		43A71743W01	Guide, Pack	45
	51	2-E	49A71744W01	Pulley, Idler	45
	52	3-D	44A71746W01	Pinion, Motor	60
	53		49A81855W01	Reel, Cap	45
	54	2-F	42A71780W02	Belt	140
	55	2-B	41A10387W02	Spring, Pinch Roller	45
	56		43A71774W01	Roller, Mode	50
	57		03S44205G30	Screw, Pan (M2.6X4)	45
	58	4-D	03A80629W01	Screw, Special (M2.6X6)	50
	59	3-D	04B41345P02	Washer, Lock (M1.7)	45
	61	3-F	04B41345P23	Washer, Lock (M1.7)	45
○	62	3-B	45A90322W01	Lever, Eject Arm A	—
●	62	3-B	45A90322W02	Lever, Eject Arm A	—

その他の電気部品

記号		索引	部品番号	部品名	標準卸価格
	501	2-B	88T75612W03	Head	1,240
○	502	2-C	01V74500W16	Assy., Main Motor (13.2V-95mA)	1,460
●	502	2-C	01V94900W74	Assy., Main Motor (13.2V-95mA)	1,480
○	503	3-C	01V91700W81	Assy., Sub Motor (7V-370mA)	1,440
●	503	3-C	01V11700Y92	Assy., Sub Motor (7V-370mA)	1,460
	504	3-F	51T63433F03	Sensor, Photo ON2170-R2	310
	505	4-F	51T63433F03	Sensor, Photo ON2170-R2	310
	506	2-D	40T15222W01	Switch, Detector (PACK IN)	130
	507	4-F	40T15382W02	Switch, Detector (PAUSE)	130
	508	4-E	40T15382W02	Switch, Detector (MODE)	130
	509	4-F	40T15382W02	Switch, Detector (METAL)	130

注記：○：GR75S22Hモデル専用,　●：GR75S42Hモデル専用,　その他：共通

Exploded View (Cassette Deck Mechanism)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0.5~1 kg·cm
11 X2
501
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13
12
10
B
502
506
1
B (Rear)
51
21
48 X2
21 X2
54
38
38
15
57
1.5 kg·cm
3
2
50
40
41
2
50
43
A
45
A
B (Rear)
B
A
6
5
49
21
21
20
19
17
(Rear)
A
16
22 X2
7
6 kg·cm
B (Rear)
6 kg·cm
57
57
503
59
4
52
9 X2
2 kg·cm
53
39
56 (Rear)
46
47
56
42
504
61 X2
18 (Rear)
17
A (Rear)
57
24
44
27
62
D
E
A
1.5 kg·cm
3
(Rear) B
A
C
37
30
34
35
58
25
6 kg·cm
36
E
C
29
28
32
D (Rear)
33
31
D
26
26
53
39
508
505
509
507

NOTE:
○: **For GR75S22H Model only,**
●: **For GR75S42H Model only,**
Others: Common

☐ ......Tightening Torque
● ......Point of GREASE applied.

Ⓐ	MOLYCOTE "G" PASTE (11S42419J19)
Ⓑ	PG-671 (11S42419J14)
Ⓒ	GREASE E-PASTE (11S42419J09)
Ⓓ	GREASE EL-30L (11S42419J06)

ALPI-00366

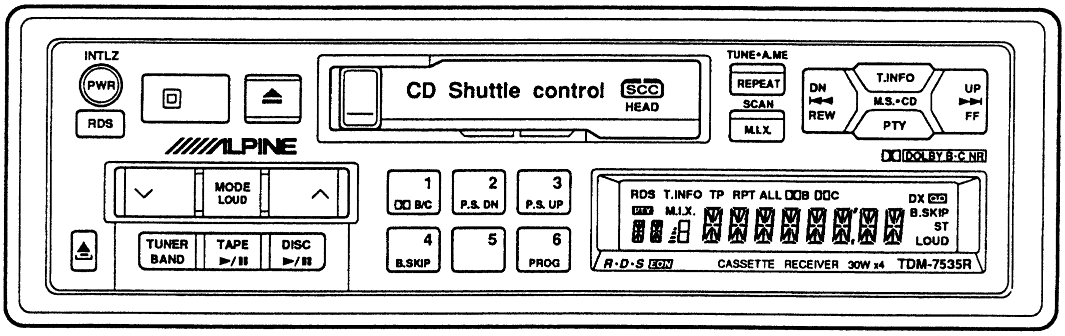
ALPINE®

SERVICE MANUAL

FM/MW/LW/RDS Cassette Receiver

CD Shuttle Controller

- For the cassette deck mechanism parts (GR75H110/120) of this model, refer to the Service Manual • GR/GR-Y Series (68P20504W07). + 293


INTLZ
PWR
RDS
ALPINE
CD Shuttle control
SCC
HEAD
TUNE•A.ME
REPEAT
SCAN
M.I.X.
DN
REW
T.INFO
M.S.•CD
PTY
UP
FF
DOLBY B·C NR
MODE
LOUD
TUNER
BAND
TAPE
►/❚❚
DISC
►/❚❚
1
B/C
2
P.S. DN
3
P.S. UP
4
B.SKIP
5
6
PROG
RDS T.INFO TP RPT ALL B C
DX
PTY
M.I.X.
B.SKIP
ST
LOUD
R·D·S EON
CASSETTE RECEIVER 30W x4
TDM-7535R

366

TDM-7531R/TDM-7532R
TDM-7535R

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Spare Schematic Diagram Inserted.

Specifications

FM RADIO

Intermediate Frequency	10.7±0.1MHz
Frequency Range	87.5～108MHz
Usable Sensitivity (Mono, 30dB S/N, at 98.1MHz)	17.2dBf
-3dB Limiting Sensitivity (at 98.1MHz)	19.2dBf
S/N Ratio (Stereo, at 98.1MHz)	56dB
Image Rejection (at 106.1MHz)	40dB
IF Rejection (at 90.1MHz)	60dB
Distortion (Input 60dB μ, at 98.1MHz)	1%
Frequency Response (Ref. 400Hz, at 98.1MHz)	100Hz : 0±3dB 10kHz : -12±3dB
Stereo Separation (1kHz, at 98.1MHz)	20dB
PS Sensitivity (at 98.1MHz)	36.2dBf
TP Sensitivity (at 98.1MHz)	36.2dBf

MW RADIO

Intermediate Frequency	450kHz
Frequency Range	531～1,602kHz
Usable Sensitivity (20dB S/N, at 999kHz)	35dB
S/N Ratio (at 999kHz)	44dB
Image Rejection (at 1,404kHz)	50dB
IF Rejection (at 603kHz)	60dB
Distortion (at 999kHz)	1.5%
Frequency Response (Ref. 400Hz, at 999kHz)	100Hz : -3±4dB 4kHz : -12+6, -12dB

LW RADIO

Intermediate Frequency	450kHz
Frequency Range	153～281kHz
Usable Sensitivity (20dB S/N, at 216kHz)	41dB
S/N Ratio (at 216kHz)	42dB
Image Rejection (at 270kHz)	40dB
IF Rejection (at 162kHz)	50dB
Distortion (at 216kHz)	1.5%
Frequency Response (Ref. 400Hz, at 216kHz)	100Hz : -3±4dB 4kHz : -12+6, -12dB

TAPE PLAYER

Wow & Flutter (JIS, WRMS/MTT-111N)	0.2%
Tape Speed (MTT-111N)	4.76cm/sec.+3 to -1%
S/N Ratio (MTT-212N)	Dolby OFF : 52dB DOLBY B NR : 60.5dB (□, △) DOLBY C NR : 67dB (△)
Distortion (MTT-118N)	2%

Frequency Response (Ref. 1kHz, -3dB, MTT-256)	250Hz~10kHz
Separation (MTT-141N)	35dB
Crosstalk (MTT-121N)	45dB

GENERAL

Power Supply	DC14.4V
Power Output/Impedance	11W/ch/4ohm (○, □) 14W/ch/4ohm (△)
Semiconductors	20IC's, 40Transistors, 27Diodes, 6Zener Diodes (○) 22IC's, 41Transistors, 27Diodes, 6Zener Diodes (□) 22IC's, 51Transistors, 27Diodes, 7Zener Diodes (△)
Dimensions (W×H×D)	Chassis : 178×50×155mm Nose : 169×45×22mm
Weight	1.5kg

Note : Due to Continuing product improvement, specifications and designs are subject to change without notice.
○ : For TDM-7531R Model Only, □ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only, Others :Common.

In Case of Difficulty

English

	If you encounter a problem, please review the items in the following checklist. This guide will help you isolate the problem if the unit is at fault. Otherwise, make sure the rest of your system is properly connected or consult your authorized Alpine dealer.

	Initial Turn-on After Installation
Symptom/Symptôme/Síntoma	**Cause and Solution**
No function or display./Fonctions inopérantes ou pas d'affichage./La unidad no funciona ni hay visualización.	• Car's ignition is off. – If connected following instructions, the unit will not operate with the car's ignition off.
	• Improper power lead connections. – Check power lead connections.
	• Blown fuse. – Check the fuse on the rear panel of the unit; replace with the proper value if necessary.

In Case of Difficulty

English

	Radio Mode
Symptom/Symptôme/Síntoma	**Cause and Solution**
Unable to receive stations./Impossible de recevoir les stations./Es imposible recibir emisoras.	• No antenna or open connection in cable. – Make sure the antenna is properly connected; replace the antenna or cable if necessary.
Unable to tune stations in the seek mode./Impossible d'accorder les stations en mode de recherche automatique./Es imposible sintonizar emisoras en el modo de búsqueda.	• You are in a weak signal area. – Make sure the tuner is in the DX mode. • If the area you are in is a primary signal area, the antenna may not be grounded and connected properly. – Check your antenna connections; make sure the antenna is properly grounded at its mounting location. • The antenna may not be the proper length. – Make sure the antenna is fully extended; if broken, replace the antenna with a new one.
Broadcast is noisy./Réception parasitée./La recepción es ruidosa.	• The antenna is not the proper length. – Extend the antenna fully; replace it if it is broken. • The antenna is poorly grounded. – Make sure the antenna is grounded properly at its mounting location.

	Tape Mode
Output sounds dull./Sortie de son atténuée./El sonido se oye inestable.	• The tape head needs cleaning. – Clean the tape head. • Incorrect Dolby NR in use. – Check Dolby NR switch setting.

In Case of Difficulty

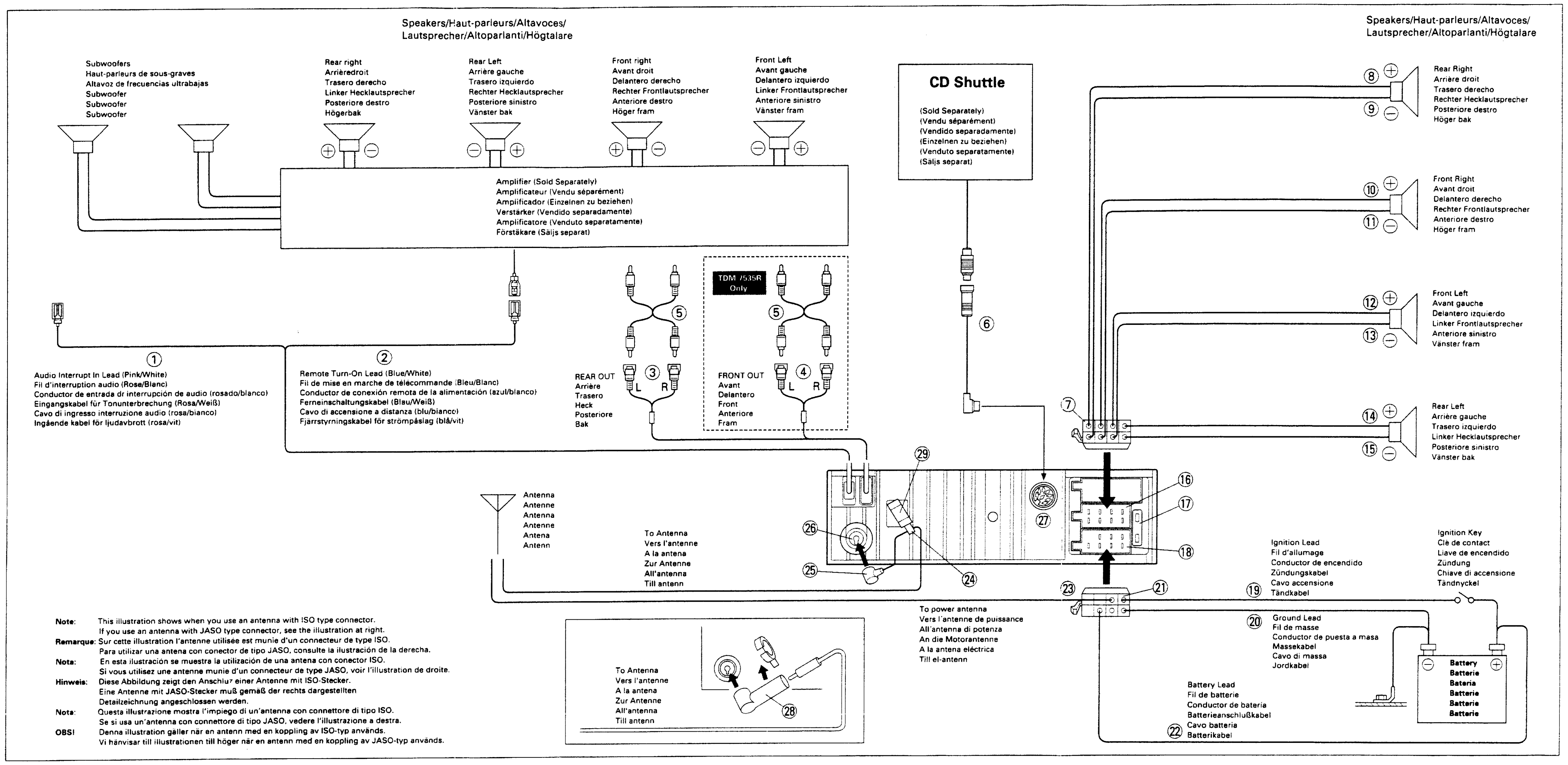
English

	CD Shuttle Mode
Symptom/Symptôme/Sintoma	**Cause and Solution**
CD Shuttle not functioning./Le changeur CD ne fonctionne pas./El cambiador de discos compactos no funciona.	• Out of operating temperature range +50°C (+120°F) for CD. – Allow the car's interior (or trunk) temperature to cool.
CD playback sound is wavering./Le son de lecture de CD est déformé./El sonido de reproducción de un disco compacto oscila.	• Moisture condensation in the CD Module. – Allow enough time for the condensation to evaporate (about 1 hour).
Unable to fast forward or backward./Avance rapide ou inversion impossibles./El disco no avanza ni retrocede.	• The CD has been damaged. – Eject the CD and discard it; using a damaged CD in your unit can cause damage to the mechanism.
Sound skips due to vibration./Pertes de son dues à des vibrations./El sonido salta debido a las vibraciones.	• Improper mounting of the CD Shuttle. – Securely re-mount the CD Shuttle. • Disc is very dirty. – Clean the disc. • Disc has scratches. – Change the disc.
Sound skips without vibration./Pertes de son non dues à des vibrations./El sonido salta sin haber vibraciones.	• Dirty or scratched disc. – Clean the disc; damaged discs should be replaced.
Single (8 cm) disc does not play./Impossible de reproduire un CD de 8 cm./No es posible reproducir un disco sencillo (8 cm).	• Single CD adaptor is not used. – Attach a single CD adaptor (recommended by Alpine) to the single disc and insert into the CD magazine.

English

	Indication for CD Shuttle
Indication/Indication/Indicación	**Cause and Solution**
- - - H	• Protective circuit is activated due to high temperature. – The indicator will disappear when the temperature returns to within operation range.
ERROR-01	• Malfunction in the CD Shuttle. – Consult your Alpine dealer. Press the magazine eject button and pull out the magazine. Check the indication. Insert the magazine again. If the magazine cannot be pulled out, consult your Alpine dealer.
	• Magazine ejection not possible. – Press the magazine eject button. If the magazine does not eject, consult your Alpine dealer.
ERROR-02	• A disc is left inside the CD Shuttle. – Press the EJECT button to activate the eject function. When the CD Shuttle finishes the eject function, insert an empty CD magazine into the CD Shuttle to receive the disc left inside the CD Shuttle.
NO MAGZN	• No magazine is loaded into the CD Shuttle. – Insert a magazine.
NO DISC	• No indicated disc. – Choose another disc.

Connections/Anschlüsse/Connexions/Collegamenti/Conexiones/Anslutningar


Speakers/Haut-parleurs/Altavoces/
Lautsprecher/Altoparlanti/Högtalare
Subwoofers
Haut-parleurs de sous-graves
Altavoz de frecuencias ultrabajas
Subwoofer
Subwoofer
Subwoofer
Rear right
Arrièredroit
Trasero derecho
Linker Hecklautsprecher
Posteriore destro
Högerbak
Rear Left
Arrière gauche
Trasero izquierdo
Rechter Hecklautsprecher
Posteriore sinistro
Vänster bak
Front right
Avant droit
Delantero derecho
Rechter Frontlautsprecher
Anteriore destro
Höger fram
Front Left
Avant gauche
Delantero izquierdo
Linker Frontlautsprecher
Anteriore sinistro
Vänster fram
Amplifier (Sold Separately)
Amplificateur (Vendu séparément)
Amplificador (Einzelnen zu beziehen)
Verstärker (Vendido separadamente)
Amplificatore (Venduto separatamente)
Förstäkare (Säljs separat)
CD Shuttle
(Sold Separately)
(Vendu séparément)
(Vendido separadamente)
(Einzelnen zu beziehen)
(Venduto separatamente)
(Säljs separat)
①
Audio Interrupt In Lead (Pink/White)
Fil d'interruption audio (Rose/Blanc)
Conductor de entrada dr interrupción de audio (rosado/blanco)
Eingangskabel für Tonunterbrechung (Rosa/Weiß)
Cavo di ingresso interruzione audio (rosa/bianco)
Ingående kabel för ljudavbrott (rosa/vit)
②
Remote Turn-On Lead (Blue/White)
Fil de mise en marche de télécommande (Bleu/Blanc)
Conductor de conexión remota de la alimentación (azul/blanco)
Ferneinschaltungskabel (Blau/Weiß)
Cavo di accensione a distanza (blu/bianco)
Fjärrstyrningskabel för strömpåslag (blå/vit)
⑤
TDM 7535R Only
⑤
REAR OUT
Arrière
Trasero
Heck
Posteriore
Bak
③
L
R
FRONT OUT
Avant
Delantero
Front
Anteriore
Fram
④
L
R
⑥
⑦
⑧
⑨
Rear Right
Arrière droit
Trasero derecho
Rechter Hecklautsprecher
Posteriore destro
Höger bak
⑩
⑪
Front Right
Avant droit
Delantero derecho
Rechter Frontlautsprecher
Anteriore destro
Höger fram
⑫
⑬
Front Left
Avant gauche
Delantero izquierdo
Linker Frontlautsprecher
Anteriore sinistro
Vänster fram
⑭
⑮
Rear Left
Arrière gauche
Trasero izquierdo
Linker Hecklautsprecher
Posteriore sinistro
Vänster bak
Antenna
Antenne
Antenna
Antenne
Antena
Antenn
To Antenna
Vers l'antenne
A la antena
Zur Antenne
All'antenna
Till antenn
㉙
㉖
㉕
㉔
㉗
⑯
⑰
⑱
㉓
㉑
To power antenna
Vers l'antenne de puissance
All'antenna di potenza
An die Motorantenne
A la antena eléctrica
Till el-antenn
Ignition Lead
Fil d'allumage
Conductor de encendido
Zündungskabel
Cavo accensione
⑲ Tändkabel
Ignition Key
Clè de contact
Liave de encendido
Zündung
Chiave di accensione
Tändnyckel
⑳
Ground Lead
Fil de masse
Conductor de puesta a masa
Massekabel
Cavo di massa
Jordkabel
Battery Lead
Fil de batterie
Conductor de bateria
Batterieanschlußkabel
Cavo batteria
㉒ Batterikabel
Battery
Batterie
Bateria
Batterie
Batterie
Batterie
To Antenna
Vers l'antenne
A la antena
Zur Antenne
All'antenna
Till antenn
㉘

Note: This illustration shows when you use an antenna with ISO type connector.
If you use an antenna with JASO type connector, see the illustration at right.
Remarque: Sur cette illustration l'antenne utilisée est munie d'un connecteur de type ISO.
Para utilizar una antena con conector de tipo JASO, consulte la ilustración de la derecha.
Nota: En esta ilustración se muestra la utilización de una antena con conector ISO.
Si vous utilisez une antenne munie d'un connecteur de type JASO, voir l'illustration de droite.
Hinweis: Diese Abbildung zeigt den Anschluß einer Antenne mit ISO-Stecker.
Eine Antenne mit JASO-Stecker muß gemäß der rechts dargestellten Detailzeichnung angeschlossen werden.
Nota: Questa illustrazione mostra l'impiego di un'antenna con connettore di tipo ISO.
Se si usa un'antenna con connettore di tipo JASO, vedere l'illustrazione a destra.
OBS! Denna illustration gäller när en antenn med en koppling av ISO-typ används.
Vi hänvisar till illustrationen till höger när en antenn med en koppling av JASO-typ används.

① **Audio Interrupt In Lead (Pink/White) (TDM-7535R only)**

② **Remote Turn-On Lead (Blue/White)**
Connect this lead to the remote turn-on lead of your amplifier or signal processor.

③ **Rear Output RCA Connectors**
RED is right and WHITE is left.

④ **Front Output RCA Connectors (TDM-7535R only)**
RED is right and WHITE is left.

⑤ **RCA Extension Cable (Sold Separately)**

⑥ **DIN Extension Cable (Sold Separately)**
NOTE:
If the DIN Extension cable supplied with the CD Shuttle does not have an "L" shaped connector, connection may be hindered at certain installation locations. In this case, purchase a 4910o2 Adaptor (sold separately).

⑦ **ISO Connector (Speaker Output, Female)**

⑧ **Right Rear (+) Speaker Output Lead (Violet)**

⑨ **Right Rear (–) Speaker Output Lead (Violet/Black)**

⑩ **Right Front (+) Speaker Output Lead (Grey)**

⑪ **Right Front (–) Speaker Output Lead (Grey/Black)**

⑫ **Left Front (+) Speaker Output Lead (White)**

⑬ **Left Front (–) Speaker Output Lead (White/Black)**

⑭ **Left Rear (+) Speaker Output Lead (Green)**

⑮ **Left Rear (–) Speaker Output Lead (Green/Black)**

⑯ **ISO Connector (Speaker Output, Male)**

⑰ **Fuse (10A)**

⑱ **ISO Power Supply Connector (Male)**

⑲ **Switched Power Lead (Ignition) (Red)**
Connect this lead to an open terminal on the vehicle's fuse box or another unused power source which provides (+) 12V only when the ignition is turned on or in the accessory position.

⑳ **Ground Lead (Black)**
Connect this lead to a good chassis ground on the vehicle. Make sure the connection is made to bare metal and is securely fastened using the sheet metal screw provided.

㉑ **ISO Power Supply Connector (Female)**

㉒ **Battery Lead (Yellow)**
Connect this lead to the positive (+) post of the vehicle's battery.

㉓ **Power Antenna Lead**
When loaded with a power antenna, connect to the +B terminal of the power antenna.

㉔ **Hook (Small)**

㉕ **ISO Antenna Plug**

㉖ **Antenna Receptacle**

㉗ **DIN Connector**
Connect this to the DIN connector on the CD Shuttle.

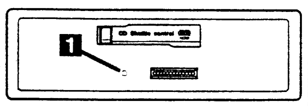
㉘ **JASO/ISO Antenna Adaptor (Included)**

㉙ **Hook (Large)**

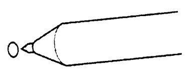
Basic Operation

English

Initial System Start-Up

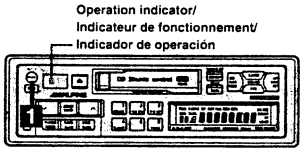


1



When operating the unit for the first time after installation or after the vehicle's battery has been disconnected and reconnected, set the volume level to its minimum, then remove the detachable front panel. Press the Reset switch with a ball-point pen or any other pointed object.

Turning Power On and Off



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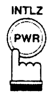
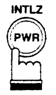


Press the PWR button to turn on the unit.

Note: The unit can be turned on by pressing any button except the eject ⏏ button or by inserting a cassette tape.

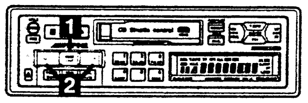


Press the PWR button again to turn off the unit.

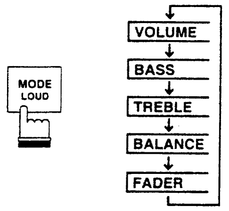
Note: Only for the TDM-7535R, the operation indicator blinks when any operational button is pressed to indicate that the unit has recognized the pressing of the button.

English

Adjusting Volume/ Bass/Treble/Balance/ Fader



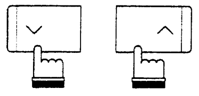
1



Press the MODE button repeatedly to choose the desired mode.

Note: If the ∨ or ∧ button is not pressed in 5 seconds after selecting the BASS, TREBLE, BALANCE and FADER modes, the unit automatically sets in the VOLUME mode.

2



Press the ∨ and ∧ buttons until the desired sound is obtained in each mode.

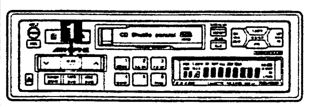
Notes:

- These buttons on the TDM-7535R have a "Dual Speed" function. Pressing lightly will change the level slowly. Pressing the buttons harder will change the level quickly. The settings of the Bass and Treble will be individually memorized for each source (FM, MW, LW, Tape and CD) until the setting is changed.
- In case that the Equalizer is connected, the Bass and Treble are adjusted on the Equalizer.

Basic Operation

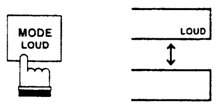
English

Turning Loundness On/Off



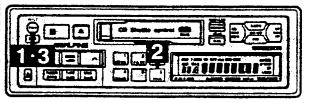
Loudness introduces a special low- and high-frequency emphasis at low listening levels to compensate for the ear's decreased sensitivity to bass and treble sound.

1

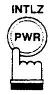


Press the LOUD button for at least **2** seconds to activate or deactivate the loudness mode.

Changing Lighting Colour (TDM-7535R only)

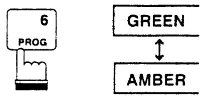


1



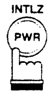
Press the POWER button for at least **2** seconds.

2



Press the Preset 6 button to change the lighting colour between green and amber.

3

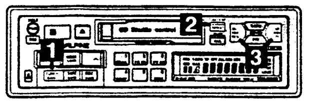


Press the POWER button to set the lighting colour.

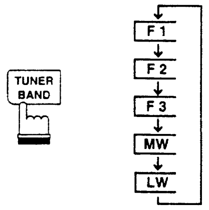
Radio Operation

English

Manual Tuning

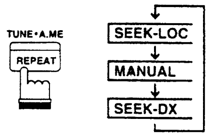


1



Press the TUNER BAND button repeatedly until the desired radio band is displayed.

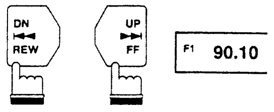
2



Press the TUNE•A.ME button repeatedly until "MANUAL" is displayed.

Note: The initial mode is SEEK-DX.

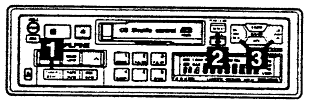
3



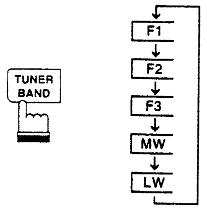
Press the DN or UP button to move downward or upward one step respectively until the desired station frequency is displayed.

English

Automatic Seek Tuning

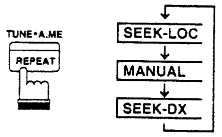


1



Press the TUNER BAND button repeatedly until the desired radio band is displayed.

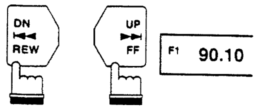
2



Press the TUNE•A.ME button to illuminate the DX indicator in the display. With the DX mode activated, both strong and weak stations will be tuned in the Auto-Seek operation.

Press the TUNE•A.ME button again to return to the local mode. The DX indicator will turn off and only strong stations will be tuned.

3

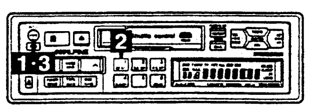


Press the DN button or UP button to automatically seek a station downward or upward respectively.

Radio Operation

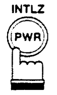
English

Adjusting FM Signal Level



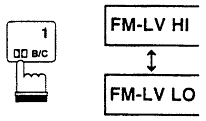
If the difference in volume levels between the FM station and the tape player is great, you can adjust the FM signal level to make the difference smaller.

1



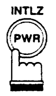
Press the PWR button for at least **2** seconds.

2



Press the Preset 1 button to select the desired signal level.

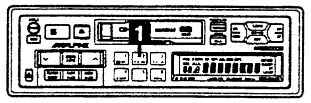
3



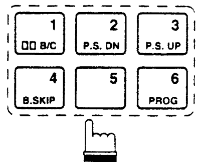
Press the PWR button to preset the FM signal level in memory and deactivate the adjusting mode.

English

Manual Storing of Station Presets



1



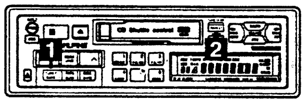
1. Tune in the desired radio station you wish to store in the preset memory.
2. Press any one of the preset buttons (1 through 6) for at least **2** seconds until the frequency display blinks.
3. Press the preset button into which you wish to store the station while the display is blinking (within 5 seconds).
   The display changes from blinking to steady lighting indicating that the station has been memorized. The preset number is also displayed.
4. Repeat the procedure to store 5 other stations onto the same band. Use this procedure for other bands.

A total of 30 stations can be stored in the preset memory (6 stations for each band: FM1, FM2, FM3, MW, LW). The RDS stations can be preset in the FM1, FM2 and FM3 bands only.

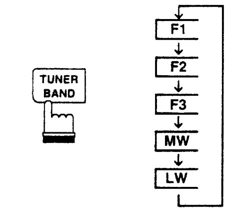
Note: If a preset memory has already been set in the same preset location, it will be cleared and the new station will be memorized.

Radio Operation

Automatic Memory of Station Presets

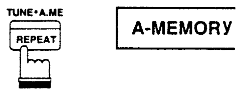


1



Press the TUNER BAND button until the desired radio band is displayed.

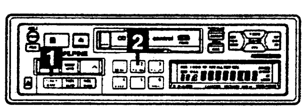
2



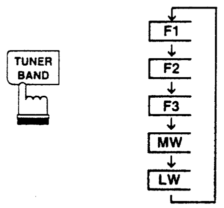
Press the TUNE•A.ME button for at least **2** seconds. The display shows "A-MEMORY" for a second then changes the radio frequency during the auto memory operation. The tuner will automatically seek and store 6 strong stations in the selected band in order of signal strength.
When the automatic storing has been completed, the tuner goes to the station stored in the preset location No. 1.

Note: If no stations are stored, the tuner will return to the original station you were listening to before the auto storing procedure began.

Tuning to Preset Stations

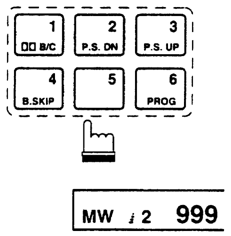


1



Press the TUNER BAND button repeatedly until the desired band is displayed.

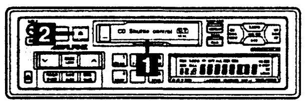
2



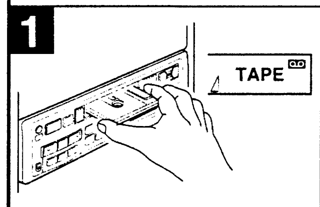
Press the station preset button that has your desired radio station in memory. The display shows the preset number, band and frequency of the station.

Cassette Player Operation

Inserting/Ejecting Cassette Tape

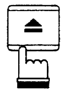


1



Insert a cassette tape into the slot with the open side facing right. When the cassette is loaded, the player automatically starts tape playback and indicates "TAPE" in the display.

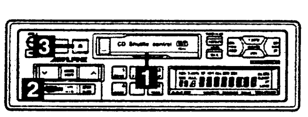
2



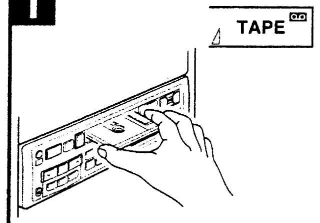
Press the Eject (⏏) button when you want to eject the cassette tape.

Notes:
1. When power is turned off or the front panel is removed, the full-logic mechanism will automatically switch to the PAUSE mode. This protects the tape from being deformed by the pinch-rollers if left for long periods.
2. Auto Metal
   When a metal cassette tape is inserted, the player automatically adjusts to the equalization for metal or any other high bias tape for optimum sound.

Normal Play and Pause

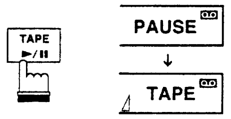


1



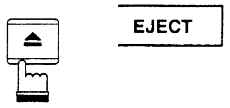
Insert a cassette (or press the TAPE ►/II button to switch from the tuner or CD Shuttle mode if a cassette is already inside the tape player). The player begins playback. The display shows "TAPE" and "△" or "▽" during tape playback to show the tape side being played. When the end of the tape is reached, the unit automatically stops and reverses the tape to play the other side of the tape.

2



Press the TAPE ►/II button to pause tape play. Press again to resume playback.

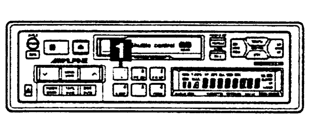
3



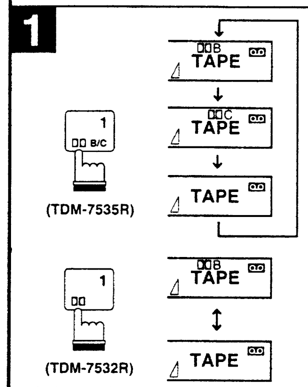
Press the Eject (⏏) button to stop the tape play and eject the cassette. The tape-direction indicator disappears.

Cassette Player Operation

Dolby B/C NR (Noise Reduction) (TDM-7535R/ TDM-7532R only)



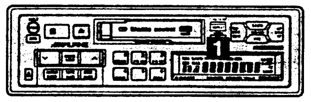
1



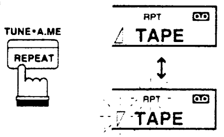
Press the Dolby NR (DD) button in the tape mode to select the Dolby B NR or C NR to play a Dolby B NR or C NR encoded tape respectively. The DD B or DD C indicator appears to show your selection and the noise level becomes low.
The Dolby C NR is available only on the TDM-7535R.

To deactivate the Dolby NR mode, press the Dolby NR button until the DD B and DD C indicators disappear.

Repeat Play (TDM-7535R/ TDM-7532R only)



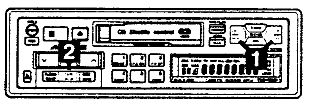
1



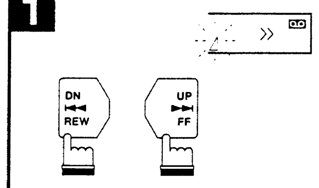
Press the REPEAT button to play back repeatedly the current programme being played. The RPT indicator appears and the programme will be played repeatedly.

Press the REPEAT button to stop the repeat play. The RPT indicator disappears.

Fast Forward and Rewind

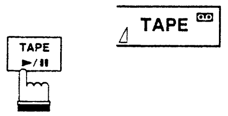


1



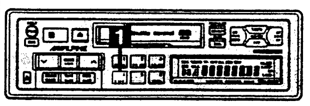
Press the REW or FF button during tape play to fast rewind or forward the tape respectively. The tape side indicator (△or ▽) blinks and >> or << moves.
When the end of the tape is reached in the rewind mode, the player stops automatically and begins playing from the beginning of the same side. When the end of the tape is reached in the fast forward mode, the player stops automatically and begins playing from the beginning of the opposite side.

2

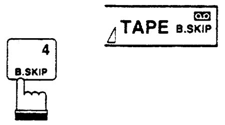


Press the TAPE ►/II button to stop fast rewinding or forwarding to resume tape play. The tape side indicator changes to steady lighting.

Blank Skip (B.SKIP) (TDM-7535/ TDM-7532R only)



1

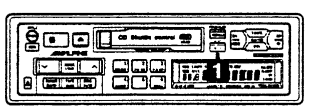


Press the B.SKIP button during tape play to skip over blank portions of the tape lasting 15 seconds or longer, "B.SKIP" appears on the display.

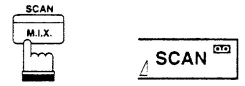
Press the B.SKIP button to cancel the blank skip mode. "B.SKIP" disappears from the display.

Cassette Player Operation

Scanning Programmes (TDM-7535R only)



1

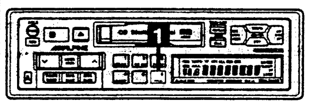


Press the SCAN button to play the first 10 seconds of each programme on the tape. "SCAN" appears on the display.

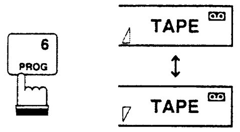
Press the SCAN button to cancel the scanning when the desired programme is found.

Note: The SCAN operation cannot detect blank sections of less than 4 seconds.

Manual Reverse

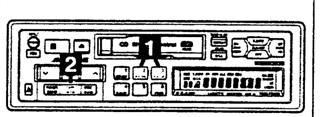


1

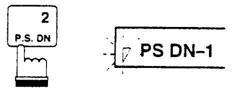


Press the Preset 6 button during tape play to change the tape direction to play the other side of the tape. The tape side indicators (△ and ▽) change to show which side of the cassette is being played.

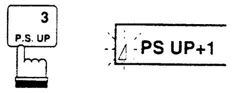
Programme Sensor (P.S.) (TDM-7535R/ TDM-7532R only)



1

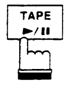


Press the P.S. DN button once to return to the beginning of the current selection being played. If you wish to return to a selection further back, press repeatedly until the number of selections you would like to skip is shown in the display.
The display will show PS-1 with the first press and will increase by one with each successive press up to PS-9. The tape indicator will blink showing the direction of your search.



Press the P.S. UP button once to advance to the beginning of the next selection. If you wish to advance to a selection further ahead, press repeatedly until the number of selections you would like to skip is shown in the display.
The display will show PS+1 with the first press and will increase with each successive press up to PS+9. The tape indicator will blink showing the direction of your search during searching operation.

2

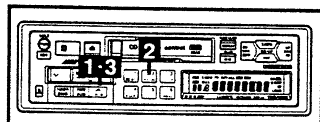


To stop the programme searching, press the tape ►/II button.

Notes:
- The programme sensor feature is functional in the tape play mode only.
- You can advance to the 9th (max.) programme or return to the 8th (max.) programme.

CD Shuttle Operation

English

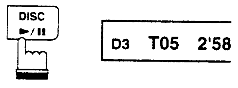


Controlling CD Shuttle (Optional)

If an optional Alpine 6-disc CD Shuttle is connected to the 8-pin DIN connector of the TDM-7535R/TDM-7532R/TDM-7531R, you can control the CD Shuttle using the TDM-7535R/TDM-7532R/TDM-7531R.

Notes: The controls on the TDM-7535R/TDM-7532R/TDM-7531R for the CD operation are operative only when the CD Shuttle is interconnected with the TDM-7535R/TDM-7532R/TDM-7531R.

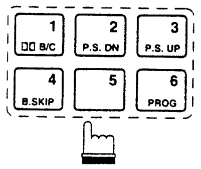
1



The display example shows when playing the Track 5 on the Disc 3.

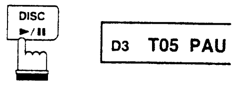
Press the DISC ►/II button to activate the connected CD Shuttle.
The display shows the disc number and track number.

2



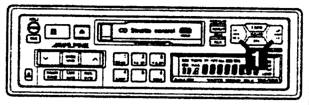
Press the Preset buttons to select the desired disc loaded in the CD Shuttle.

3



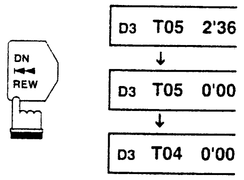
Press the DISC ►/II button to pause CD play. The display shows "PAU."
To resume CD play, press again.
The PAU indicator disappears.

English

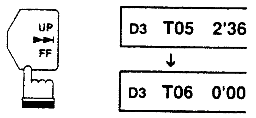


Music Sensor (M.S.) Skip

1

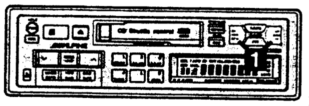


Momentarily press the DN I◄◄ button once to return to the beginning of the current track. If you wish to return to the beginning of a track further back, repeatedly press until you reach the desired track. (The display example shows when you are playing the track No. 5 of the disc 3.)



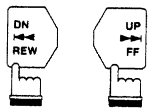
Press the UP ►►I button once to advance to the beginning of the next track. If you wish to advance to a track further ahead, press repeatedly until the desired track is reached.

Note: The music sensor feature is functional in the play or pause mode.



Fast Forward and Backward

1

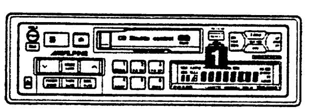


Press and hold the I◄◄ DN or UP ►►I button to quickly move backward or forward respectively until you reach the desired portion.

Note: This feature works only in the CD playback mode.

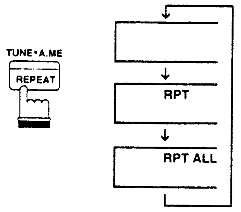
CD Shuttle Operation

English



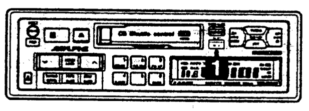
Repeat Play on Single Track or Entire Disc

1



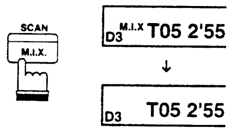
Press the REPEAT button to display "RPT" or "RPT ALL" to play back repeatedly the current track being played or the entire disc selected.

Note: Single track cannot be repeated during M.I.X. play.



M.I.X. (Random) Play

1



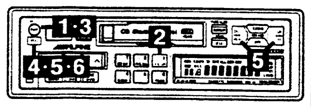
Press and hold the M.I.X. button for at least **2** seconds during CD play or in the pause mode until the M.I.X. indicator appears. The display shows the disc number, elapsed time, "M.I.X." and track number being played. The tracks on the disc will be played back in a random sequence.
After all the tracks on the disc have been played back, the player loads the next disc and begins a random sequence play on the next disc.

Press and hold the M.I.X. button for at least **2** seconds again until the M.I.X. indicator disappears to cancel the M.I.X. play.

RDS (Radio Data System)

English

The RDS (Radio Data System) is a radio information system using the 57 kHz subcarrier of regular FM broadcast. The RDS allows you to receive a variety of information such as traffic information, station names, and to automatically re-tune to a stronger transmitter that is broadcasting the same programme.

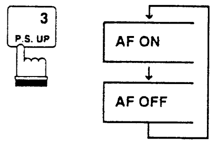


Setting RDS Reception Mode and Receiving

1

Press and hold the INTLZ (Initialize) button for at least **2** seconds.

2



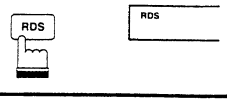
Press repeatedly the Preset 3 button to select the AF (Alternative Frequencies) ON or OFF mode.

Note: Use the AF OFF mode when automatic re-tuning is not required.

3

Press the INTLZ button to activate the selected mode.

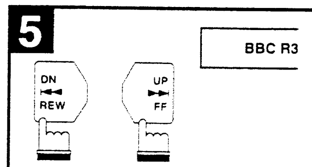
4



Press the RDS button to activate the RDS mode.

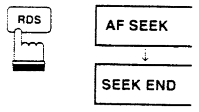
English

5



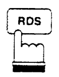
Press the DN or UP button to tune in the desired RDS station:
When the station signal being received has become weak:

A. In the AF ON mode the unit automatically re-tunes to a stronger station that carries the same programme.



B. In the AF OFF/AF ON mode
Press and hold the RDS button for at least **2** seconds to have the unit automatically search for a stronger station in the AF (Alternative Frequencies) list.
If there is no AF station, the display shows "SEEK END."

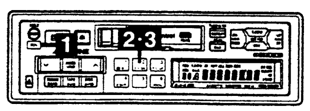
6



Press the RDS button again to deactivate the RDS mode.

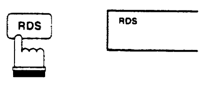
RDS (Radio Data System)

English



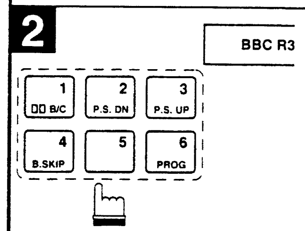
Recalling Preset RDS Stations

1



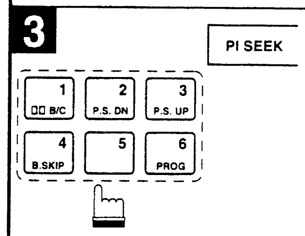
Press the RDS button to activate the RDS mode.

2



Press the preset location button in which your desired RDS station is preset. If the preset station's signal is weak, the unit automatically searches and tunes to a stronger station in the AF (Alternative Frequencies) list.

3

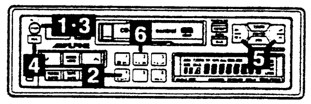


If the preset station and the stations in the AF list cannot be received:

Press the same preset location button again to search again for a station in the PI (Programme Identification) list.
If there are still no stations receivable in the area, the unit displays the frequency of the preset station and the preset indicator disappears. If the signal level of the Regional (Local) station being tuned becomes too weak to receive, press the same preset location button to tune in a Regional station in other district.

Note: For presetting the RDS stations, refer to the Radio Operation section of the Owner's Manual. The RDS stations can be preset in the F1, F2 and F3 bands only.

English

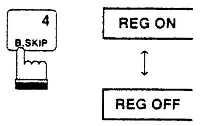


Receiving RDS Regional (Local) Stations

1

Press and hold the INTLZ button for at least **2** seconds.

2

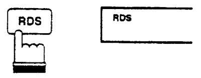


Press the Preset 4 button to turn on or off the REG (Regional) mode.
In the REG ON mode, the unit automatically keeps receiving the related local RDS station.

3

Press the INTLZ button to activate the selected mode.

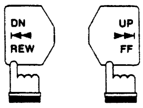
4



Press the RDS button to activate the RDS mode.

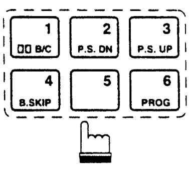
English

5



Press the DN or UP button to tune in the desired local (Regional) RDS station.

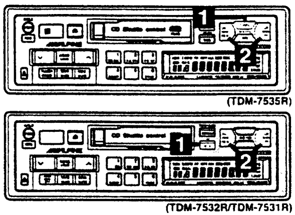
6



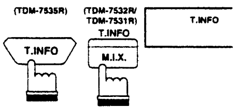
Press repeatedly the preset location button corresponding to your desired station during reception of a Regional station to search for a receivable Regional station. Each pressing tunes in another receivable Regional station.

English

Receiving Traffic Information

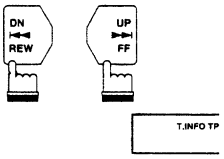


1



Press the T.INFO button to display the T.INFO indicator.

2



Press the DN or UP button to select your desired traffic information station. When a traffic information station is tuned in, the TP indicator lights up.

Traffic information is heard only when it is being broadcast. If traffic information is not being broadcast, the unit is set in the standby mode. When a traffic information broadcast begins, the unit automatically receives it, the display shows "TRF-INFO", and within 5 seconds the PS (Programme Service Name) being received appears.

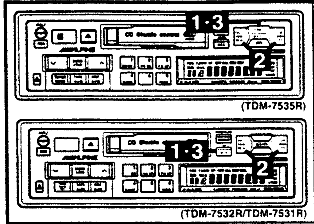
When traffic information broadcast is over, the unit will automatically set in the standby mode.

Notes:

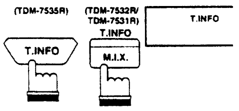
- If the traffic information broadcast signal falls below a certain level, the unit remains in the receiving mode for 1 minute. If the signal remains below a certain level for over 1 minute, the unit is set in the standby mode for the traffic information broadcast.
- If you do not want to listen to the traffic information being received, lightly press the T. INFO button to skip that traffic information message. The T. INFO mode will remain in the ON position to receive the next traffic information message.

English

Receiving Traffic Information While Playing Casstte or Radio

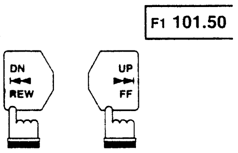


1



Press the T.INFO button until the T.INFO indicator appears.

2



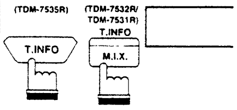
Press the DN and UP buttons to select a traffic information station if necessary.

- When a traffic information broadcast starts, the unit automatically mutes the cassette tape or the regular FM broadcast.
- When the traffic information broadcast finishes, the unit automatically returns to the original source play before the traffic information broadcast began.
- **When traffic information stations cannot be received:**
  In the tuner mode:
  When the TP signal can no longer be received, an alarm will be sounded after 1 minute.
  In the tape mode:
  When the TP signal can no longer be received, the traffic information station of another frequency will be selected automatically.

Note: The receiver is equipped with the EON (Enhanced Other Networks) function in order to keep track of additional alternative frequencies to the AF list. If the station being received does not broadcast the traffic information, the receiver automatically tunes in the related station that broadcasts the traffic information when it occurs.

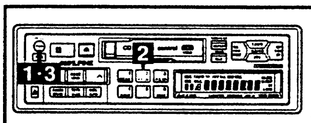
English

3



Press the T.INFO button to deactivate the Traffic Information mode.

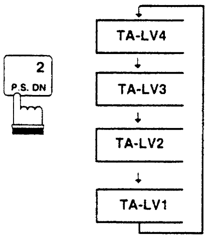
Presetting Volume Level for Traffic Information



1

Press and hold the INTLZ button for at least 2 seconds.

2



Press the Preset 2 button repeatedly until the desired volume level is obtained.

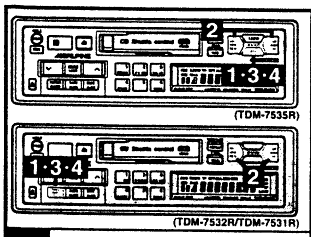
3

Press the INTLZ button again to preset the volume level for the traffic information listening.
When a traffic information broadcast starts, the unit automatically adjusts the volume to the preset level.

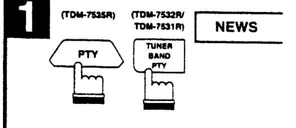
RDS (Radio Data System)

English

PTY (Programme Type) Tuning


2
1·3·4
(TDM-7535R)
1·3·4
2
(TDM-7532R/TDM-7531R)

1

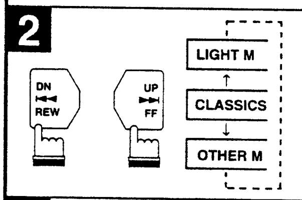

(TDM-7535R)
(TDM-7532R/TDM-7531R)
NEWS
PTY
TUNER BAND PTY

Press the PTY button (for at least 2 seconds for the TDM-7532R/TDM-7531R) to activate the PTY mode. The PTY (Programme Type) of the station being currently received will be displayed for 5 seconds.

- If there is no receivable PTY broadcast, "NONE" will be displayed for 5 seconds.
- If no RDS station can be received, the display shows "NO RDS."

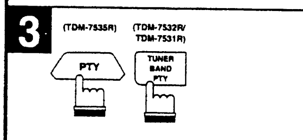
Note: If no button is pressed within 5 seconds after pressing the PTY button, the PTY mode will be automatically cancelled.

2


LIGHT M
CLASSICS
OTHER M
DN REW
UP FF

Press the DN and UP buttons within 5 seconds to choose the desired programme type while the PTY (programme type) is being displayed.

3

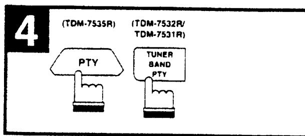

(TDM-7535R)
(TDM-7532R/TDM-7531R)
PTY
TUNER BAND PTY

Press the PTY button within 5 seconds after selecting the programme type to start searching for a station in the selected programme type.
The chosen programme type indicator blinks during searching and lights when a station is found.

If no station is found, "NO PTY" will be displayed for 5 seconds.

English

4

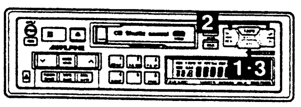

(TDM-7535R)
(TDM-7532R/TDM-7531R)
PTY
TUNER BAND PTY

Press the PTY button (for at least 2 seconds for the TDM-7532R/TDM-7531R) to cancel the PTY mode.

RDS (Radio Data System)

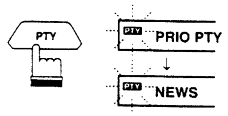
English

Priority PTY (Programme Type) (TDM-7535R ONLY)



This function allows presetting of a programme type such as music category, news, etc. You can listen to a programme in the preset programme type as the unit automatically gives priority to the preset programme type when it begins broadcasting, and interrupts the programme you are currently listening. This feature is functional when your unit is set to a mode other than the LW and MW.

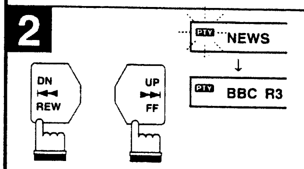
1


PTY
PRIO PTY
NEWS

Press and hold the PTY button for 2 seconds to activate the PRIORITY PTY mode.
"PRIO PTY" is displayed for 2 seconds and then the program type for 5 seconds. The initial setting is "NEWS."

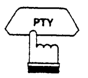
Note: If no button is pressed within 5 seconds after pressing the PTY button, the PRIORITY PTY mode is automatically cancelled.

2


NEWS
BBC R3
DN REW
UP FF

Press the DN or UP button within 5 seconds while "NEWS" is being displayed to choose a desired programme type. Then press and hold the PTY button for 2 seconds. The PRIORITY PTY function will activate.

3



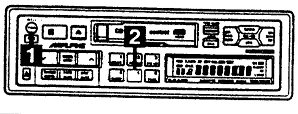
Press and hold the PTY button for 2 seconds to activate the PRIORITY PTY mode again.

- To change the program category, perform the step 2.
- To disable the PRIORITY PTY function, press the PTY button for less than 2 seconds.

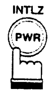
Note: In the PRIORITY PTY function, unlike in the T.INFO function, the volume does not increase during operation.

English

Turning Emergency Alarm On or Off

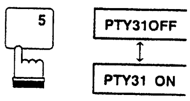


1



Press and hold the INTLZ button for at least 2 seconds.

2


5
PTY31OFF
PTY31 ON

Press the Preset 5 button repeatedly to select the PTY31 ON or PTY31 OFF mode. In the PTY31 ON mode, the unit will produce an alarming sound when the unit receives the PTY31 (Emergency Broadcast) signal.

Disassembly Instructions

1. Removal of Nose Unit

(1) Refer to the Owner's Manual (Part No. 68P61329W47).

2. Removal of Front Escutcheon

(1) After removal of Assy., Face Plate and Top Cover, remove the Hooks (a) as shown in Figure 1

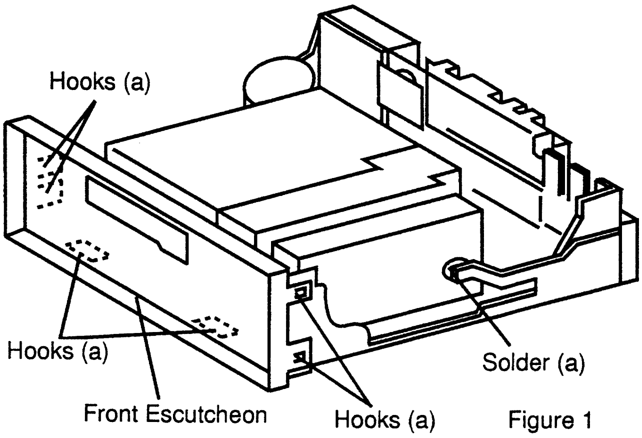

Hooks (a)
Hooks (a)
Solder (a)
Front Escutcheon
Hooks (a)

Figure 1

3. Removal of Cassette Deck

(1) After removal of Front Escutcheon, remove three screws marked "○" and the Hook (b) as shown in Figure 2.

(2) Disconnect one Connector from the Cassette Deck.

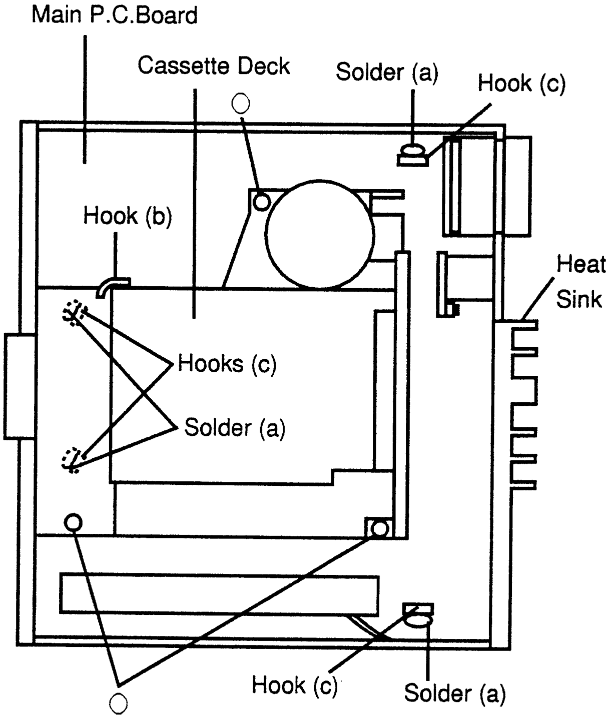

Main P.C.Board
Cassette Deck
Solder (a)
Hook (c)
Hook (b)
Heat Sink
Hooks (c)
Solder (a)
Hook (c)
Solder (a)
○
○

Figure 2

4. Removal of Main P.C.Board

(1) Remove the four screws marked "●" as shown in Figure 3.

(2) Remove the solder (a) and Hooks (c) as shown in Figure 1, 2.

(3) Disconnect two Connectors from the Main P.C.Board.

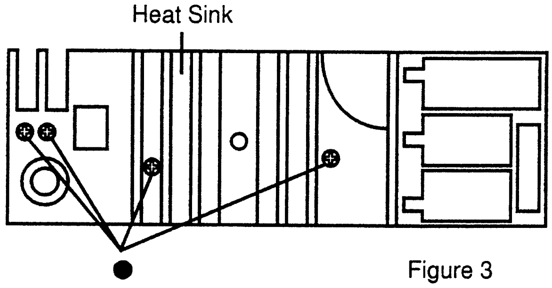


Figure 3

5. Removal of Front P.C.Board

(1) After removal of Nose Unit, remove two screws marked "△" and the Hooks (d) as shown in Figure 4.

(2) Remove the Hooks (e) as shown in Figure 4.

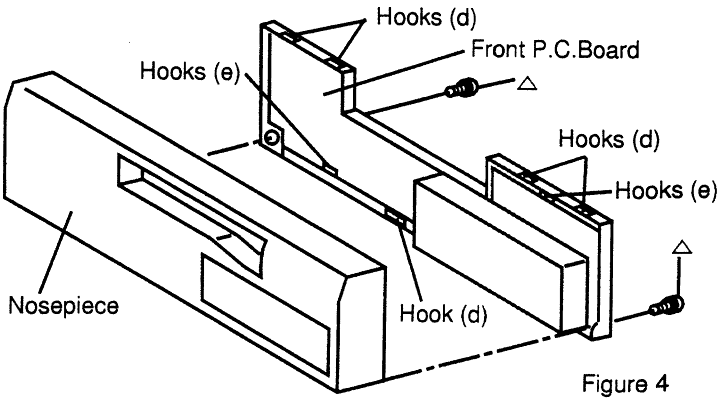
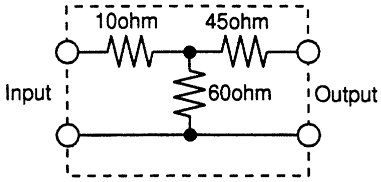

Hooks (d)
Front P.C.Board
Hooks (e)
△
Hooks (d)
Hooks (e)
△
Nosepiece
Hook (d)

Figure 4

Adjustment Procedures

1. FM SECTION

(1) Dummy Antenna Circuit


10ohm
45ohm
Input
60ohm
Output

For 50 ohm FM Signal Generator

Figure 5

(2) Connections

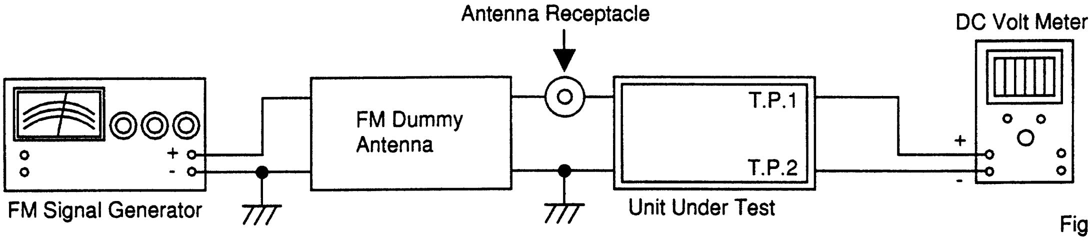

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.1
T.P.2
+
-
+
-
FM Signal Generator
Unit Under Test

Figure 6

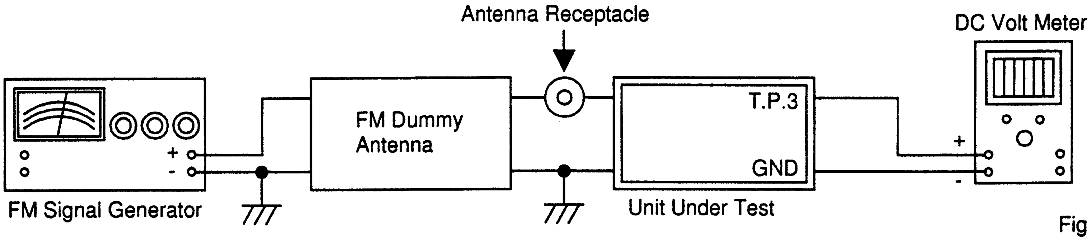

Antenna Receptacle
DC Volt Meter
FM Dummy Antenna
T.P.3
GND
+
-
+
-
FM Signal Generator
Unit Under Test

Figure 7

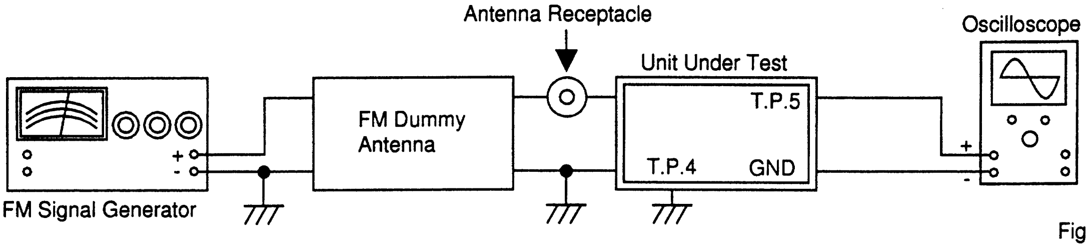

Antenna Receptacle
Oscilloscope
Unit Under Test
FM Dummy Antenna
T.P.5
T.P.4
GND
+
-
+
-
FM Signal Generator

Figure 8

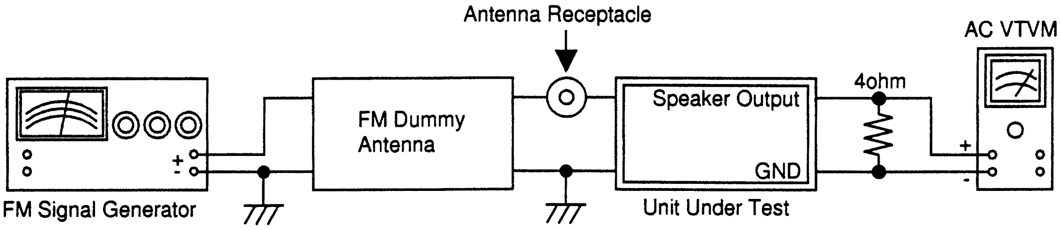

Antenna Receptacle
AC VTVM
4ohm
FM Dummy Antenna
Speaker Output
GND
+
-
+
-
FM Signal Generator
Unit Under Test

Figure 9

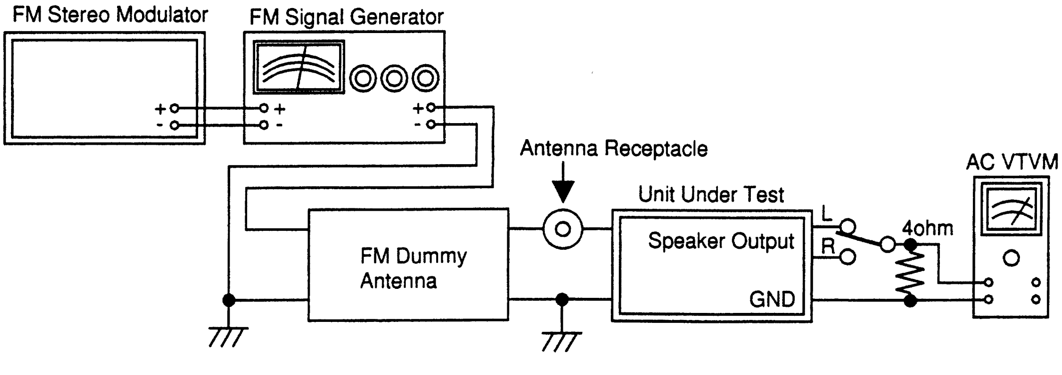
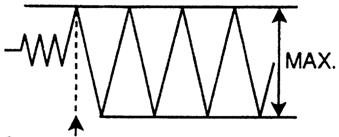

FM Stereo Modulator
FM Signal Generator
+
-
+
-
+
-
Antenna Receptacle
AC VTVM
Unit Under Test
L
R
4ohm
Speaker Output
GND
FM Dummy Antenna

Figure 10

(3) Control Settings

Power Switch .... ON
Fader Control .... Center Position
Balance Control .... Center Position
Treble / Buss Control..................................Center Position
Band Switch .... FM
Others .... OFF

(4) Adjustment Procedures

Step	Description		Connection	Signal Generator	Dial Control	Test Point	Adjustment
1	IF Adjustment		Figure 6	98.1MHz, 72dB (Mod. OFF)	98.1MHz	T.P.1 T.P.2	Adjust L2101 to 0 ±15mV.
2	Signal Meter Adjustment		Figure 7	98.1MHz, 46dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	T.P.3	Adjust VR2101 to 3.5 ±0.1V
3	Seek Stop Adjustment		Figure 8	98.1MHz, 30dB (Mod. OFF)	98.1MHz	T.P.4 T.P.5	Adjust VR2104 for the waveform changing to maximum output. Figure : Waveform of T.P.5 output.  Stop the adjust VR2104 at this time.
4	Noise Level Adjustment	(1)	Figure 9	98.1MHz, 72dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	Speaker Output	Adjust MAIN VOLUME (S411 (○□), S422 (○□), S418 (△), S428 (△)) to obtain 2V output. This value is 0dB.
		(2)	Figure 9	98.1MH, -19dB (Mod. 400Hz, Dev. 40kHz)	98.1MHz	Speaker Output	Adjust VR2105 to -25 ±3dB output at SG level minimum.
5	Stereo Blend Adjustment (Lch)		Figure 10	98.1MHz, 40dB (Mod. 1kHz, Dev. 36kHz, Stereo, Lch Only)	98.1MHz	Speaker Output	Adjust VR2102 for Lch and Rch output level difference to be 8 ±2dB.
6	Stereo Separation Adjustment (Lch)		Figure 10	98.1MHz, 72dB (Mod. 1kHz, Dev. 36kHz, Stereo, Lch Only)	98.1MHz	Speaker Output	Adjust VR2103 for Rch output to be minimum, and confirm Lch and Rch output level difference is more than 20dB.
7	Stereo Blend Adjustment (Rch)		Figure 10	98.1MHz, 40dB (Mod. 1kHz, Dev. 36kHz, Stereo, Rch Only)	98.1MHz	Speaker Output	Proceed same adjustment under step 5.
8	Stereo Separation Adjustment (Rch)		Figure 10	98.1MHz, 72dB (Mod. 1kHz, Dev. 36kHz, Stereo, Rch Only)	98.1MHz	Speaker Output	Proceed same adjustment under step 6 by alternating Lch and Rch.

Note : ○ : For TDM-7531R Model Only, □ : For TDM-7532R Model Only ,
△ : For TDM-7535R Model Only, Others : Common.

2 TAPE PLAYER SECTION

(1) Connections

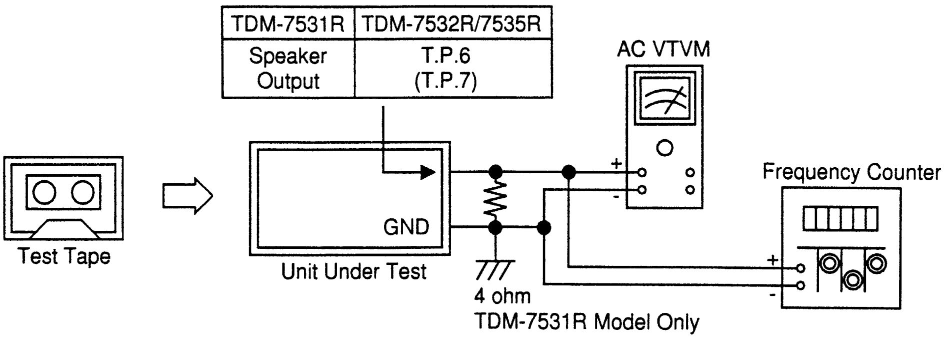

TDM-7531R
TDM-7532R/7535R
Speaker Output
T.P.6 (T.P.7)
AC VTVM
+
-
Frequency Counter
+
-
GND
Test Tape
Unit Under Test
4 ohm
TDM-7531R Model Only

Figure 11

(2) Control Settings

Power Switch .... ON
Fader Control .... Center Position
Balance Control .... Center Position
Treble / Buss Control...................................Center Position
Others .... OFF

(3) Adjustment Procedures

Step	Description	Test Tape	Connection	Test Point	Adjustment Point	Adjustment
1	Head Azimuth Adjustment	MTT-114NB (14kHz)	Figure 11	○ Speaker Output □ T.P.6 (Lch) △ T.P.7 (Rch)	Head Azimuth Adjustment Screws (Figure 12)	Adjust for Max. and same level output at Normal and Reverse positions.
2	Dolby Level Adjustment (TDM-7532R/ 7535R Model Only)	MTT-150 (400Hz)	Figure 11	T.P.6 (Lch) T.P.7 (Rch)	VR201 (Lch) VR202 (Rch)	Adjust for 245mV (□)/388mV(△) ± 1dB at T.P.6 (Lch) and T.P.7 (Rch).
3	Tape Speed Adjustment	MTT-111N (3kHz)	Figure 11	○ Speaker Output □ T.P.6 (Lch) or △ T.P.7 (Rch)	Tape Speed Adjustment (Figure 13)	Adjust for 2,970 to 3,090Hz at T.P.6 (T.P.7).

Note : ○ : For TDM-7531R Model Only, □ : For TDM-7532R Model Only ,
△ : For TDM-7535R Model Only, Others : Common.

Adjustment Locations

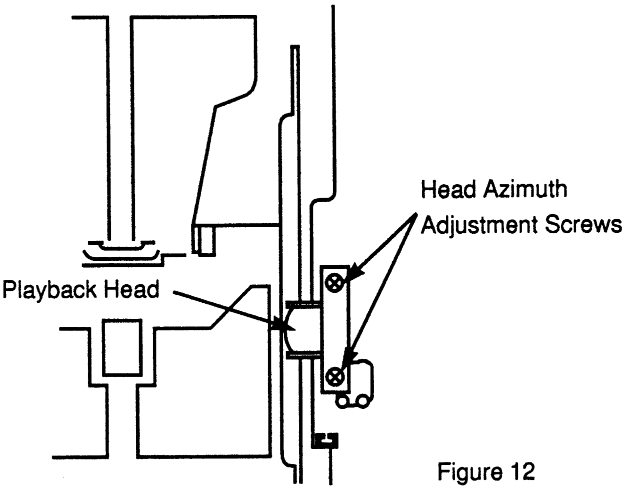

Head Azimuth
Adjustment Screws
Playback Head

Figure 12

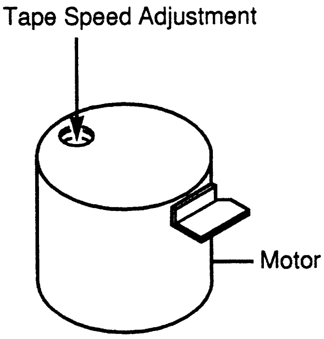
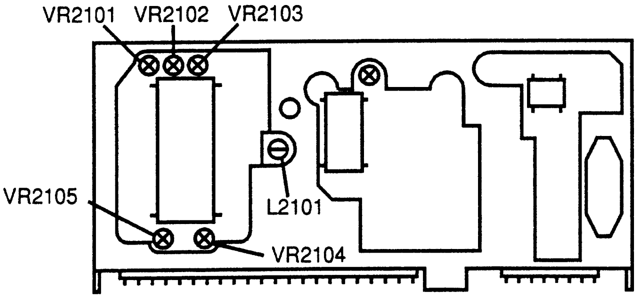

Tape Speed Adjustment
Motor

Figure 13


VR2101
VR2102
VR2103
VR2105
L2101
VR2104

FM / MW/LW Tuner Unit (FE001)

Note : For the Adjustment parts (S411(○□), S422(○□), S418(△), S428(△), VR201, VR202) and Test Points, refer to the Parts Layout on P.C.Boards and Wiring Diagram.

Description of IC Terminal

45609W26 : IC501

No.	Symbol	I/O	Terminal Description
1	NOSE ON	I	Front panel detection terminal.
2	AV$_{REF}$	I	Reference voltage input terminal for A/D converter.
3	V$_{DD}$	—	V$_{DD}$ terminal.
4			
5	AV REF OUT	O	Reference voltage output terminal to A/D converter.
6	PLAY SOL	O	Play Solenoid control signal output terminal in deck mechanism.
7	RF SOL	O	RF Solenoid control signal output terminal in deck mechanism.
8	EJECT SOL	O	Eject Solenoid control signal output terminal in deck mechanism.
9	MOTOR CONT	O	Determins rotation direction of motor in deck mechanism.
10	O. MOTOR	O	Determins start and stop of motor in deck mechanism.
11	FOR/$\overline{\text{REV}}$	O	FOR/REV indicator output terminal.
12	O. FAST	O	Gain control signal output terminal to MS IC.
13	PACK IN	I	Switch to detect cassette is installed into cassette holder or not.
14	M.S.DET	I	Music ON/OFF switching signal input terminal.
15	GND	—	GND short.
16			
17			
18	AREA0	I	Initial setting input terminal.
19	AREA1		
20	TP ALARM	O	ALARM signal output terminal (at TP OFF ALARM).
21	NC	—	Open.
22	PWR IC ON	O	Stand-by control signal output terminal to Power IC.
23	POWER CONT	O	Power control signal output terminal to Audio line and lighting.
24	A.MUTE	O	Audio mute signal output terminal.
25	NC	—	Open.
26			
27			
28	IN INT	I	INT signal input terminal.
29	CHG D-OUT	O	BUS line output terminal to CD changer.
30	E.VOL. CLK	O	Serial clock data output terminal to Electrical Volume.
31	E.VOL. DATA	O	Serial data output terminal for Electrical Volume.
32	NC	—	Open.
33	GND	—	GND short.
34	NC	—	Open.
35	$\overline{\text{DOLBY C}}$	O	Dolby C NR ON/OFF signal output terminal.
36	$\overline{\text{DOLBY B}}$	O	Dolby B NR ON/OFF signal output terminal.
37	LCD CE	O	CE signal output terminal to LCD Driver.
38	DTS CE	O	CE signal output terminal to DTS microcomputer (IC504).

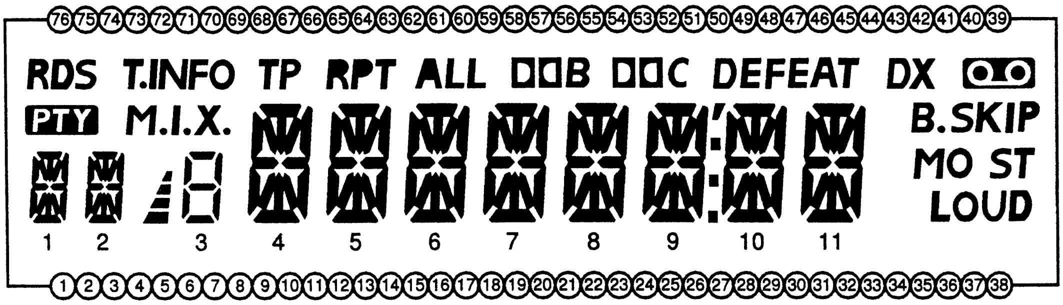
No.	Symbol	I/O	Terminal Description
39	DTS START	O	Data sync signal output terminal to DTS microcomputer (IC504).
40	NOSE POWER	O	Power control signal output terminal to Front panel.
41	LED IND	O	Action indicator output terminal.
42	LCD CLK	O	Clock signal output terminal to LCD Driver.
43	$\overline{\text{GRN}}$/ORG	O	ILLUMI Control signal output terminal.
44	LCD DATA	O	Data output terminal to LCD Driver.
45	$\overline{\text{LCD INH}}$	O	INH signal output terminal to LCD Driver.
46	$\overline{\text{DTS MUTE}}$	I	Audio mute signal input terminal from DTS microcomputer (IC504).
47	ACC+5	I	ACC power supply detection terminal.
48	CHG D-IN	I	BUS line input terminal to CD changer.
49	REMOCON	I	Data input terminal from Remocon receiver.
50	DTS STATUS	I	Serial data input terminal from DTS microcomputer (IC504).
51	DTS CMD	O	Serial data output terminal to DTS microcomputer (IC504).
52	$\overline{\text{DTS SCK}}$	O	Communication sync signal output terminal to DTS microcomputer (IC504).
53	BATT+5V	I	BATT detector terminal.
54	GND	—	GND short.
55			
56	NC	—	Open.
57	GND	—	GND short.
58	X1	I	Input terminal for system clock OSC.
59	X2	O	Output terminal for system clock OSC.
60	$\overline{\text{RESET}}$	I	System reset signal input terminal.
61	GND	—	GND short.
≀			
75			
76	PACK DOWN	I	Switch to detect cassette holder is moved down completely.
77	RUN DET	I	Signal showing take-up reel is roating or not.
78	KEY-IN AD0	I	KEY input terminal.
79	KEY-IN AD1		
80	KEY-IN AD2		

75099W04 : IC504

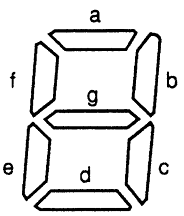
No.	Symbol	I/O	Terminal Description
1	LW	O	LW band selection terminal.
2	LO/$\overline{\text{DX}}$	O	Local/DX control terminal.
3	NC	—	Open.
4	AV$_{SS}$	—	GND potential terminal for A/D converter.
5	$\overline{\text{LPF SW}}$	O	LPF time constant switching terminal at AF CHECK/SW.
6	IF MUTE	O	Mute signal output terminal at AF check.
7	AV$_{REF1}$	I	Reference voltage input terminal for A/D Converter.
8	PLL UP	—	Pull up terminal.

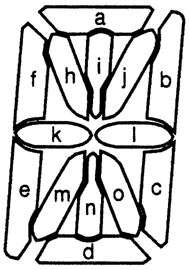
No.	Symbol	I/O	Terminal Description
9	NC	—	Open.
10			
11	PLL CLK	O	Clock output terminal to PLL.
12	PLL DATA	O	Data output terminal to PLL.
13	PLL CE	O	Data communication control signal output terminal to PLL.
14	DTS MUTE	O	Audio mute output terminal.
15	DTS START	I	DTS data start input terminal.
16	DTS CMD	I	Serial data input terminal from Main microcomputer (IC501).
17	DTS STATUS	O	Serial data output terminal to Main microcomputer (IC501).
18	DTS CLOCK	I	Communication data sync signal input terminal form Main microcomputer (IC501).
19	NC	—	Open.
~			
32			
33	V_{SS}	—	GND potential terminal.
34	NC	—	Open.
~			
57			
58	FM/$\overline{AM}$	O	FM/AM power control terminal.
59	AUDIO IN	I	Audio xerox input terminal.
60	$\overline{RESET}$	I	System reset input terminal.
61	RDS CLK	I	RDS clock input terminal.
62	RDS DATA	I	RDS data input terminal.
63	DTS CE	I	Terminal to make Main microcomputer (IC501) in stand-by status.
64	NC	—	Open.
~			
66			
67	50K REF	O	L.P.F. swithing output terminal at RDS mode.
68	V_{DD}	—	Positive power supply terminal.
69	X2	O	Output terminal for system clock OSC.
70	X1	I	Input terminal for system clock OSC.
71	V_{SS}	—	GND short.
72	NC	—	Open.
73	PLL D-IN	I	Data input terminal from PLL.
74	AV_{DD}	—	Analog power supply terminal for A/D converter.
75	AV_{REF0}	I	Reference voltage input terminal for A/D converter.
76	S.METER	I	Signal meter input terminal.
77	ADJ-ON	I	Port detects adjoining rejection interference of station.
78	MULTI PATH	I	Port detects multi path interference of station.
79	$\overline{ST}$	I	ST signal input terminal.
80	SD	I	Station detector signal input terminal for FM/AM (MW/LW).

LCD Display



RDS
T.INFO
TP
RPT
ALL
□□B
□□C
DEFEAT
DX
PTY
M.I.X.
B.SKIP
MO ST
LOUD
1
2
3
4
5
6
7
8
9
10
11

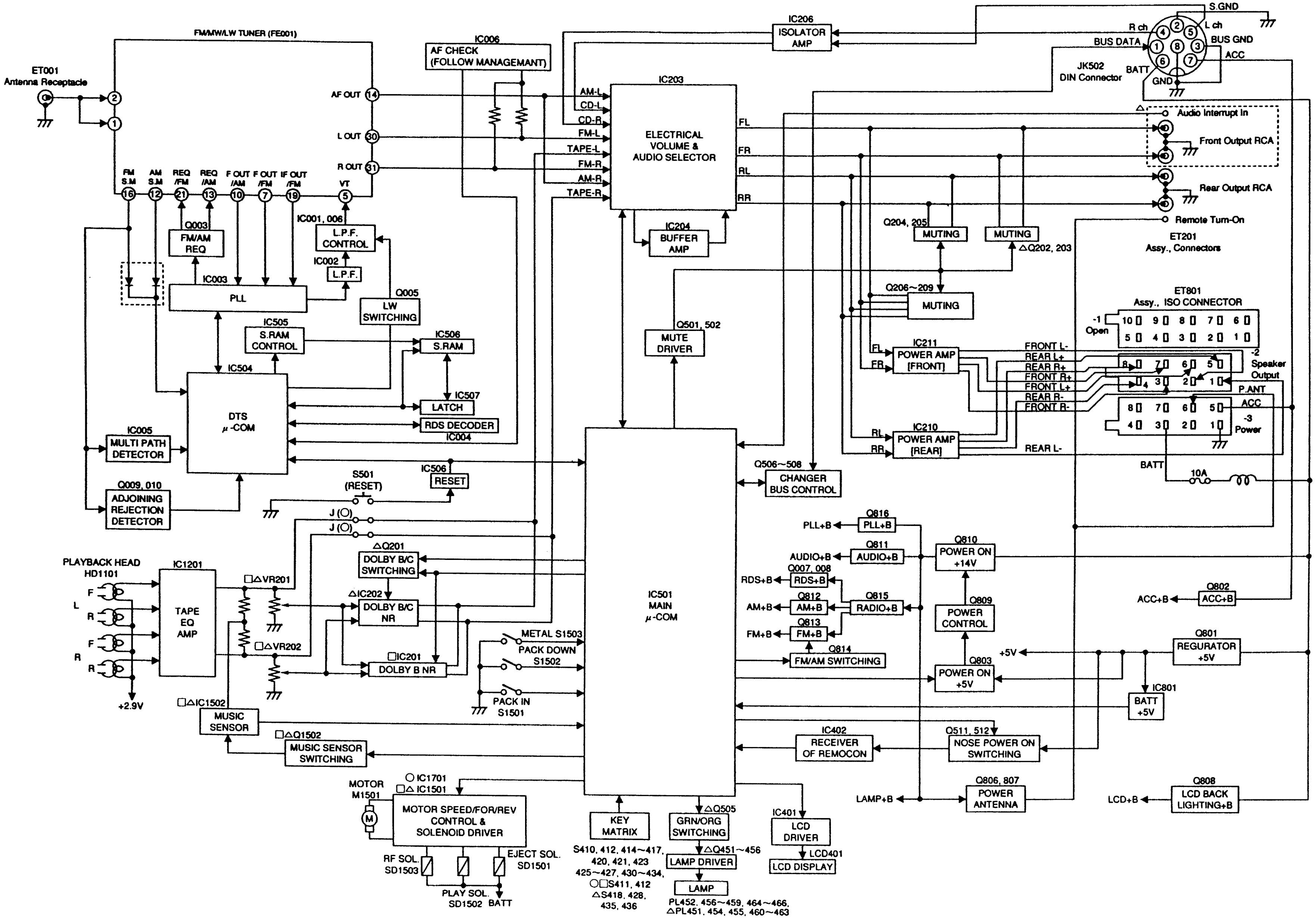




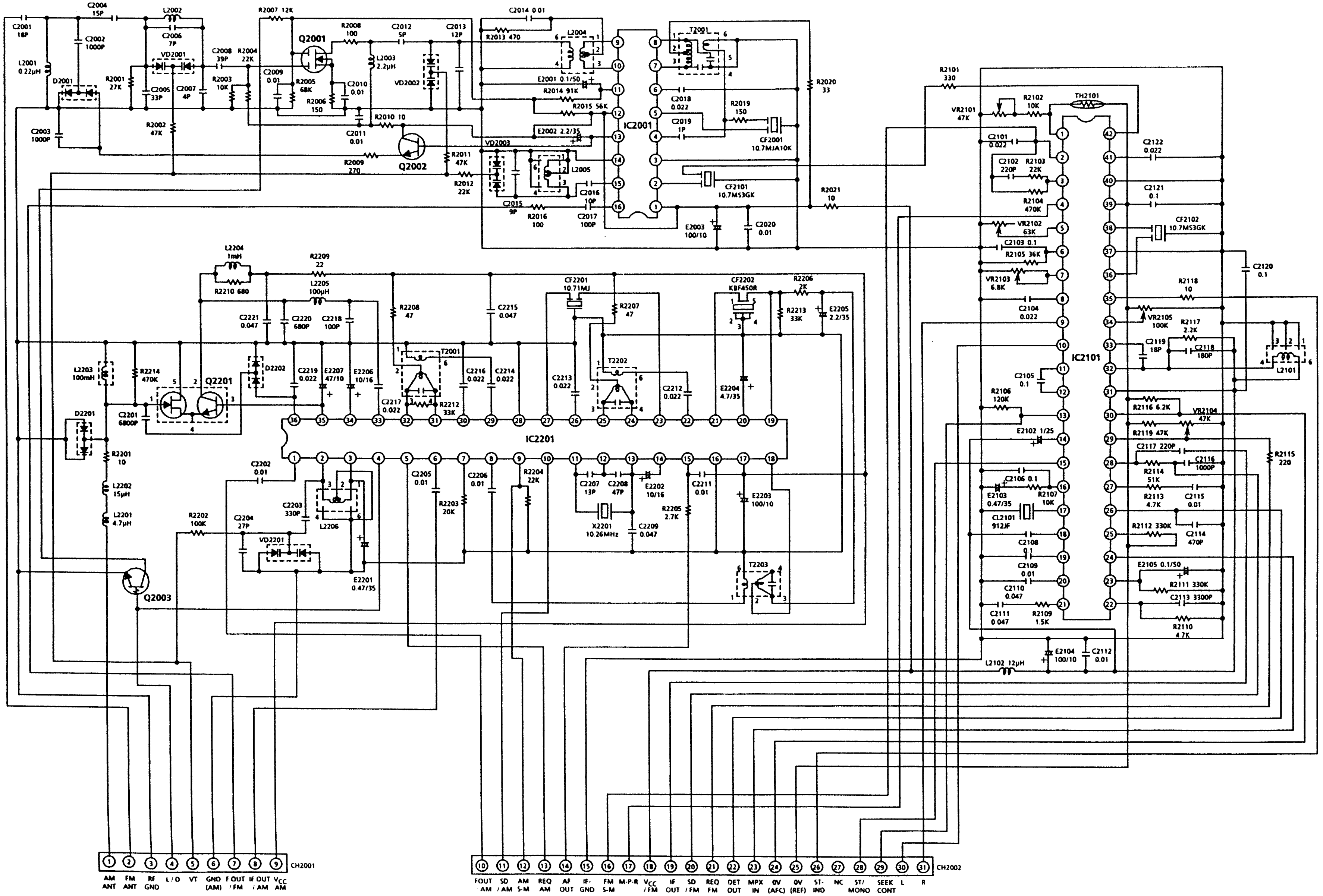
a
f
h
i
j
b
k
l
e
m
n
o
c
d

PIN No.	COM1	COM2	COM3	PIN No.	COM1	COM2	COM3
1				39			COM3
2				40		COM2	
3	1-h	1-k	1-m	41	COM1		
4	1-j	1-l	1-o	42	●▪●	ST	LOUD
5	2-j	2-l	2-c	43	DX	B.SKIP	MO
6	3-f	3-g	3-e	44	11-b	11-c	11-d
7				45	11-j	11-l	11-o
8				46	11-a	11-i, 11-n	11-m
9				47	11-h	11-k	11-e
10				48	DEFEAT	11-f	10-c
11				49	10-j	10-i, 10-n	10-d
12				50	10-f	10-k	10-e
13				51	′	:	▪
14	5-b	5-l	5-o	52	9-a	9-b	9-c
15	6-h	6-k	6-e	53	9-f	9-k	9-m
16	6-a	6-i, 6-n	6-m	54	□□C	8-b	9-e
17	7-f	7-e	6-d	55	8-h	8-k	8-m
18	7-h	7-k	7-m	56	□□B	7-b	7-c
19	7-j	7-l	7-o	57	7-a	7-i, 7-n	7-d
20	8-f	8-e	8-d	58	ALL	6-b	6-c
21				59	6-j	6-l	6-o
22				60	RPT	6-f	5-c
23	8-a	8-i, 8-n	8-o	61	5-j	5-i, 5-n	5-d
24	8-j	8-l	8-c	62	5-a	5-h	5-m
25	9-h	9-i, 9-n	9-d	63	5-f	5-k	5-e
26	9-j	9-l	9-o	64	TP	4-b	4-c
27	10-a	10-h	10-m	65	4-j	4-l	4-o
28	10-b	10-l	10-o	66	4-a	4-i, 4-n	4-d
29				67	4-h	4-k	4-m
30				68	4-f	3-b	4-e
31				69	M.I.X.	3-a, 3-d	3-c
32				70	T.INFO	2-b	◢
33				71	2-a	2-i, 2-n	2-o
34				72	2-h	2-k	2-m
35				73	2-f	2-e	2-d
36				74	PTY	1-b	1-c
37				75	1-a	1-i, 1-n	1-d
38				76	RDS	1-f	1-e

Block Diagram


FM/MW/LW TUNER (FE001)
ET001
Antenna Receptacle
AF OUT 14
L OUT 30
R OUT 31
FM S.M 16
AM S.M 12
REQ /FM 21
REQ /AM 13
F OUT /AM 10
F OUT /FM 7
IF OUT /FM 19
VT 5
Q003
FM/AM REQ
IC001, 006
L.P.F. CONTROL
IC002
L.P.F.
IC003
PLL
Q005
LW SWITCHING
IC505
S.RAM CONTROL
IC506
S.RAM
IC504
DTS µ-COM
IC507
LATCH
RDS DECODER
IC004
IC005
MULTI PATH DETECTOR
Q009, 010
ADJOINING REJECTION DETECTOR
S501 (RESET)
IC506
RESET
J (O)
J (O)
IC006
AF CHECK (FOLLOW MANAGEMANT)
IC206
ISOLATOR AMP
IC203
ELECTRICAL VOLUME & AUDIO SELECTOR
AM-L
CD-L
CD-R
FM-L
TAPE-L
FM-R
AM-R
TAPE-R
FL
FR
RL
RR
IC204
BUFFER AMP
Q501, 502
MUTE DRIVER
IC501 MAIN µ-COM
Q506~508
CHANGER BUS CONTROL
S.GND
R ch
L ch
BUS DATA
BUS GND
ACC
BATT
GND
JK502 DIN Connector
△ Audio Interrupt In
Front Output RCA
Rear Output RCA
Remote Turn-On
ET201 Assy., Connectors
Q204, 205
MUTING
MUTING
△Q202, 203
Q206~209
MUTING
ET801 Assy., ISO CONNECTOR
-1 Open
10 9 8 7 6
5 4 3 2 1
IC211
POWER AMP (FRONT)
IC210
POWER AMP (REAR)
FRONT L-
REAR L+
REAR R+
FRONT R+
FRONT L+
REAR R-
FRONT R-
REAR L-
-2 Speaker Output
P.ANT
ACC
-3 Power
BATT
10A
PLAYBACK HEAD HD1101
L
R
F
R
F
R
IC1201
TAPE EQ AMP
+2.9V
□△VR201
□△VR202
△Q201
DOLBY B/C SWITCHING
△IC202
DOLBY B/C NR
□IC201
DOLBY B NR
METAL S1503
PACK DOWN S1502
PACK IN S1501
□△IC1502
MUSIC SENSOR
□△Q1502
MUSIC SENSOR SWITCHING
MOTOR M1501
○ IC1701
□△ IC1501
MOTOR SPEED/FOR/REV CONTROL & SOLENOID DRIVER
RF SOL. SD1503
PLAY SOL. SD1502
BATT
EJECT SOL. SD1501
KEY MATRIX
S410, 412, 414~417, 420, 421, 423 425~427, 430~434, ○□S411, 412 △S418, 428, 435, 436
△Q505
GRN/ORG SWITCHING
△Q451~456
LAMP DRIVER
LAMP
PL452, 456~459, 464~466, △PL451, 454, 455, 460~463
IC401
LCD DRIVER
LCD401
LCD DISPLAY
Q816
PLL+B
PLL+B
Q811
AUDIO+B
AUDIO+B
Q007, 008
RDS+B
RDS+B
Q812
AM+B
AM+B
Q813
FM+B
FM+B
Q815
RADIO+B
Q814
FM/AM SWITCHING
Q810
POWER ON +14V
Q809
POWER CONTROL
Q803
POWER ON +5V
+5V
Q802
ACC+B
ACC+B
Q801
REGURATOR +5V
IC801
BATT +5V
IC402
RECEIVER OF REMOCON
Q511, 512
NOSE POWER ON SWITCHING
LAMP+B
Q806, 807
POWER ANTENNA
Q808
LCD BACK LIGHTING+B
LCD+B

Tuner Schematic Diagram



C2001 18P
C2004 15P
L2002
C2002 1000P
C2006 7P
L2001 0.22μH
D2001
VD2001
C2005 33P
C2007 4P
R2001 27K
R2002 47K
C2003 1000P
C2008 39P
R2004 22K
R2003 10K
R2007 12K
Q2001
R2008 100
C2009 0.01
R2005 68K
R2006 150
C2010 0.01
C2011 0.01
L2003 2.2μH
C2012 5P
C2013 12P
VD2002
R2010 10
R2009 270
Q2002
R2011 47K
R2012 22K
C2014 0.01
R2013 470
L2004
E2001 0.1/50
R2014 91K
R2015 56K
E2002 2.2/35
VD2003
L2005
C2015 9P
R2016 100
C2016 10P
C2017 100P
IC2001
T2001
C2018 0.022
C2019 1P
R2019 150
CF2001 10.7MJA10K
CF2101 10.7MS3GK
E2003 100/10
C2020 0.01
R2020 33
R2021 10
L2204 1mH
R2210 680
R2209 22
L2205 100μH
C2221 0.047
C2220 680P
C2218 100P
R2208 47
C2215 0.047
CF2201 10.71MJ
R2207 47
CF2202 KBF450R
R2206 2K
R2213 33K
E2205 2.2/35
L2203 100mH
R2214 470K
Q2201
D2202
C2219 0.022
E2207 47/10
E2206 10/16
T2001
C2217 0.022
R2212 33K
C2216 0.022
C2214 0.022
C2213 0.022
T2202
C2212 0.022
E2204 4.7/35
D2201
C2201 6800P
R2201 10
L2202 15μH
L2201 4.7μH
Q2003
IC2201
C2202 0.01
C2203 330P
L2206
R2202 100K
C2204 27P
VD2201
E2201 0.47/35
C2205 0.01
R2203 20K
C2206 0.01
R2204 22K
C2207 13P
C2208 47P
E2202 10/16
X2201 10.26MHz
C2209 0.047
R2205 2.7K
C2211 0.01
E2203 100/10
T2203
R2101 330
VR2101 47K
R2102 10K
TH2101
C2101 0.022
C2102 220P
R2103 22K
R2104 470K
VR2102 63K
C2103 0.1
R2105 36K
VR2103 6.8K
C2104 0.022
C2105 0.1
R2106 120K
E2102 1/25
C2106 0.1
E2103 0.47/35
R2107 10K
CL2101 912JF
C2108
C2109 0.01
C2110 0.047
C2111 0.047
R2109 1.5K
IC2101
C2122 0.022
C2121 0.1
CF2102 10.7MS3GK
C2120 0.1
R2118 10
VR2105 100K
R2117 2.2K
C2119 18P
C2118 180P
L2101
R2116 6.2K
VR2104 47K
R2119 47K
C2117 220P
C2116 1000P
R2115 220
R2114 51K
R2113 4.7K
C2115 0.01
R2112 330K
C2114 470P
E2105 0.1/50
R2111 330K
C2113 3300P
R2110 4.7K
E2104 100/10
C2112 0.01
L2102 12μH
CH2001
AM ANT
FM ANT
RF GND
L/O
VT
GND (AM)
F OUT /FM
IF OUT /AM
VCC AM
CH2002
FOUT AM
SD /AM
AM S-M
REQ AM
AF OUT
IF-GND
FM S-M
M-P-R
VCC /FM
IF OUT
SD /FM
REQ FM
DET OUT
MPX IN
0V (AFC)
0V (REF)
ST-IND
NC
ST/MONO
SEEK -CONT
L
R

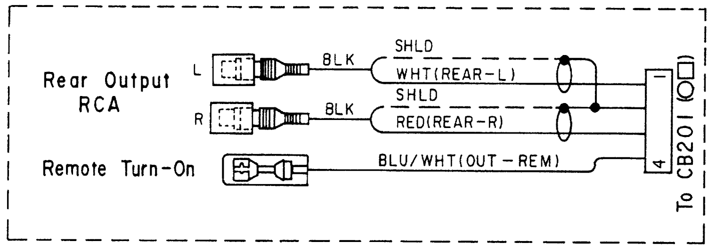
MEMO

Parts Layout on P.C. Boards and Wiring Diagram (1/2)

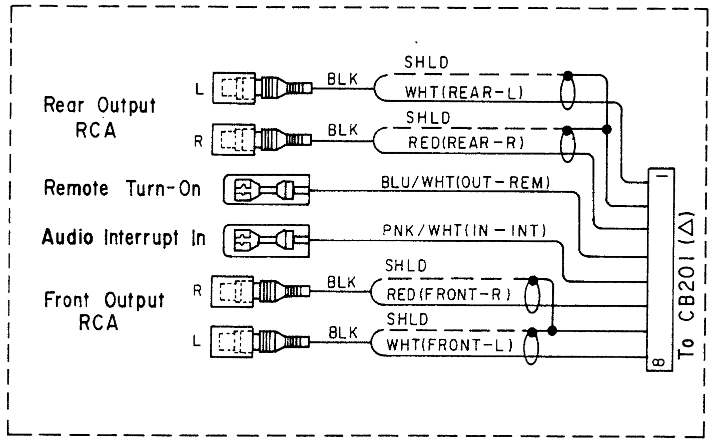
ET801

1 BATT	9 NC
2 BATT	10 RR−
3 FR+	11 GND
4 FR−	12 RL+
5 FL+	13 RL−
6 NC	14 P.ANT
7 FL−	15 ACC
8 RR+	16 NC

○□ ET201 Assy, Connectors

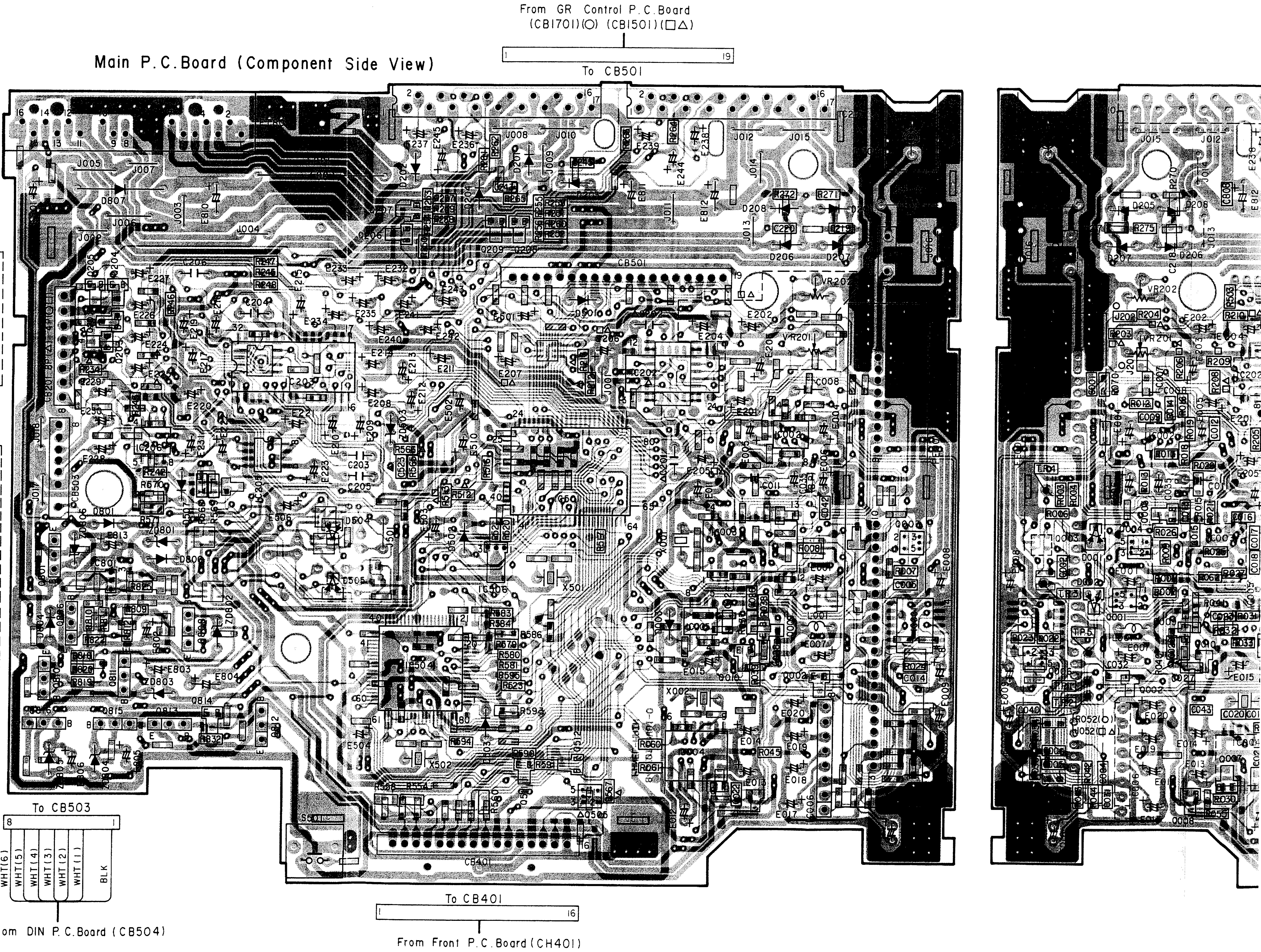

Rear Output RCA
L
R
BLK
BLK
SHLD
WHT(REAR−L)
SHLD
RED(REAR−R)
Remote Turn-On
BLU/WHT(OUT−REM)
1
4
To CB201 (○□)

△ET201 Assy, Connectors


Rear Output RCA
L
R
BLK
BLK
SHLD
WHT(REAR−L)
SHLD
RED(REAR−R)
Remote Turn-On
BLU/WHT(OUT−REM)
Audio Interrupt In
PNK/WHT(IN−INT)
Front Output RCA
R
L
BLK
BLK
SHLD
RED(FRONT−R)
SHLD
WHT(FRONT−L)
1
8
To CB201 (△)

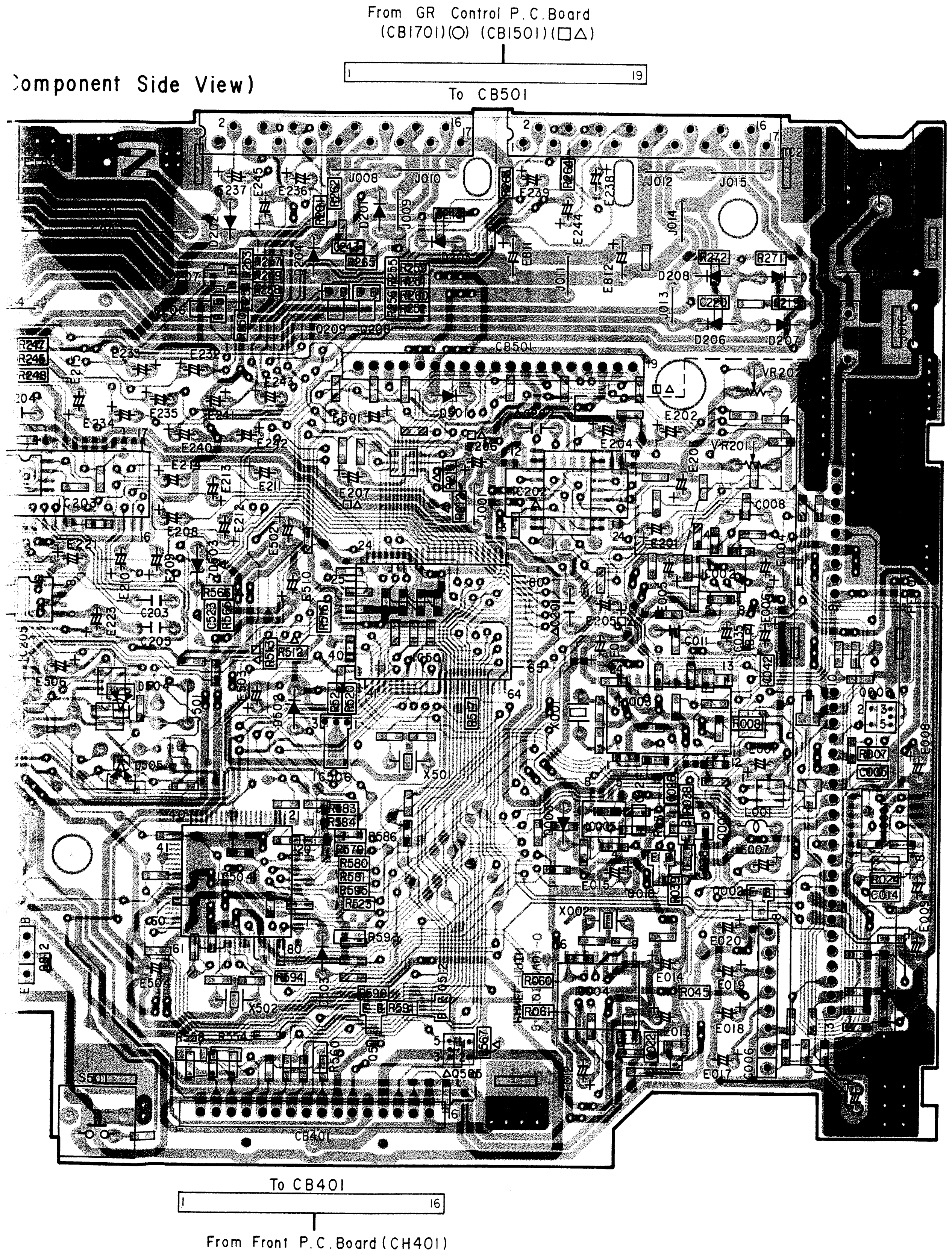
Note :
○ : For TDM−7531R Model Only,
□ : For TDM−7532R Model Only,
△ : For TDM−7535R Model Only,
Others : Common

Main P.C.Board (Component Side View)

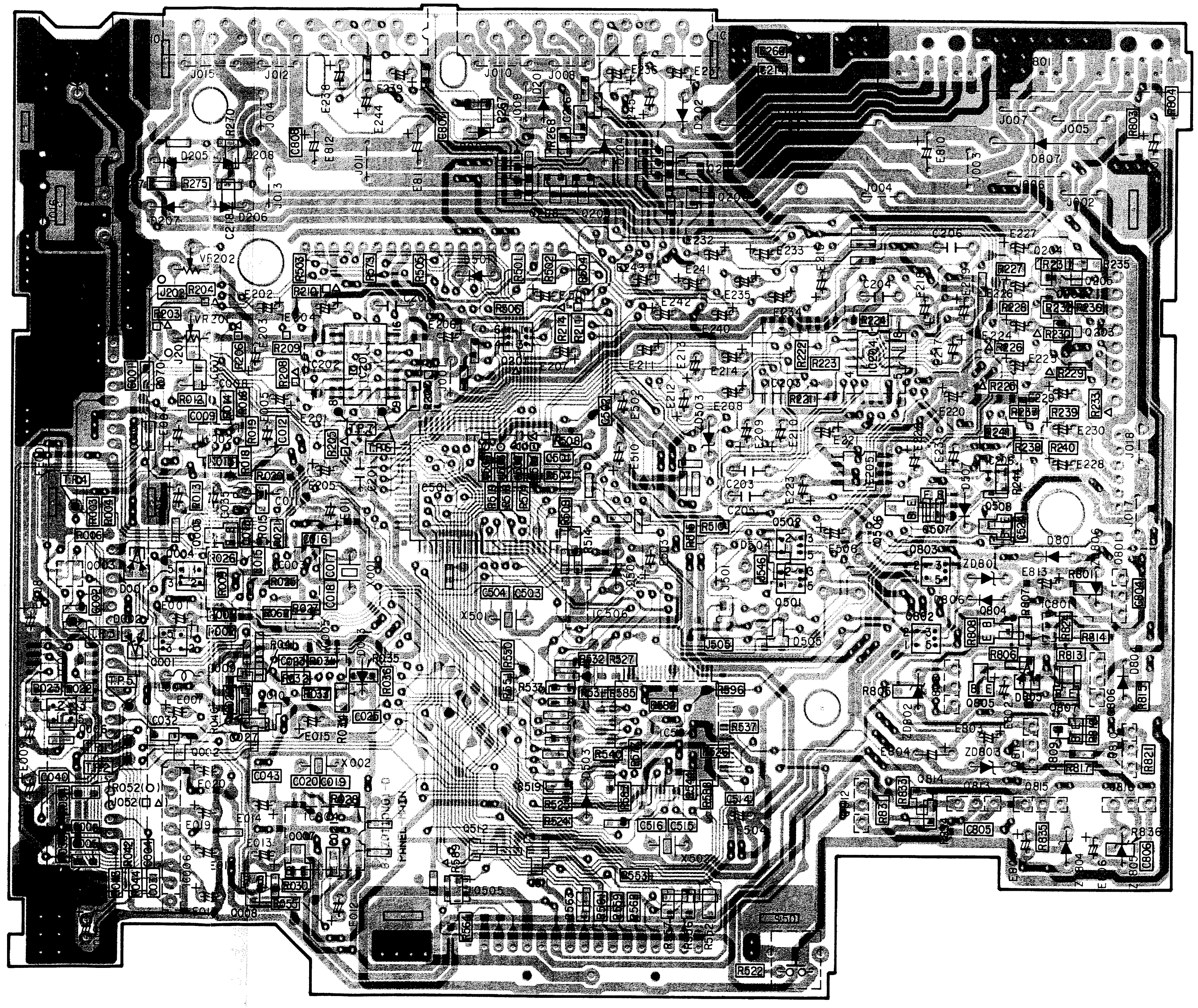

From GR Control P.C.Board (CB1701)(○) (CB1501)(□△)
1
19
To CB501
To CB503
8
1
WHT(6)
WHT(5)
WHT(4)
WHT(3)
WHT(2)
WHT(1)
BLK
From DIN P.C.Board (CB504)
To CB401
1
16
From Front P.C.Board (CH401)
CB501
CB503
CB401

ram (1/2)

:omponent Side View)


From GR Control P.C.Board
(CB1701)(○) (CB1501)(□△)
1
19
To CB501
CB501
CB401
To CB401
1
16
From Front P.C.Board (CH401)

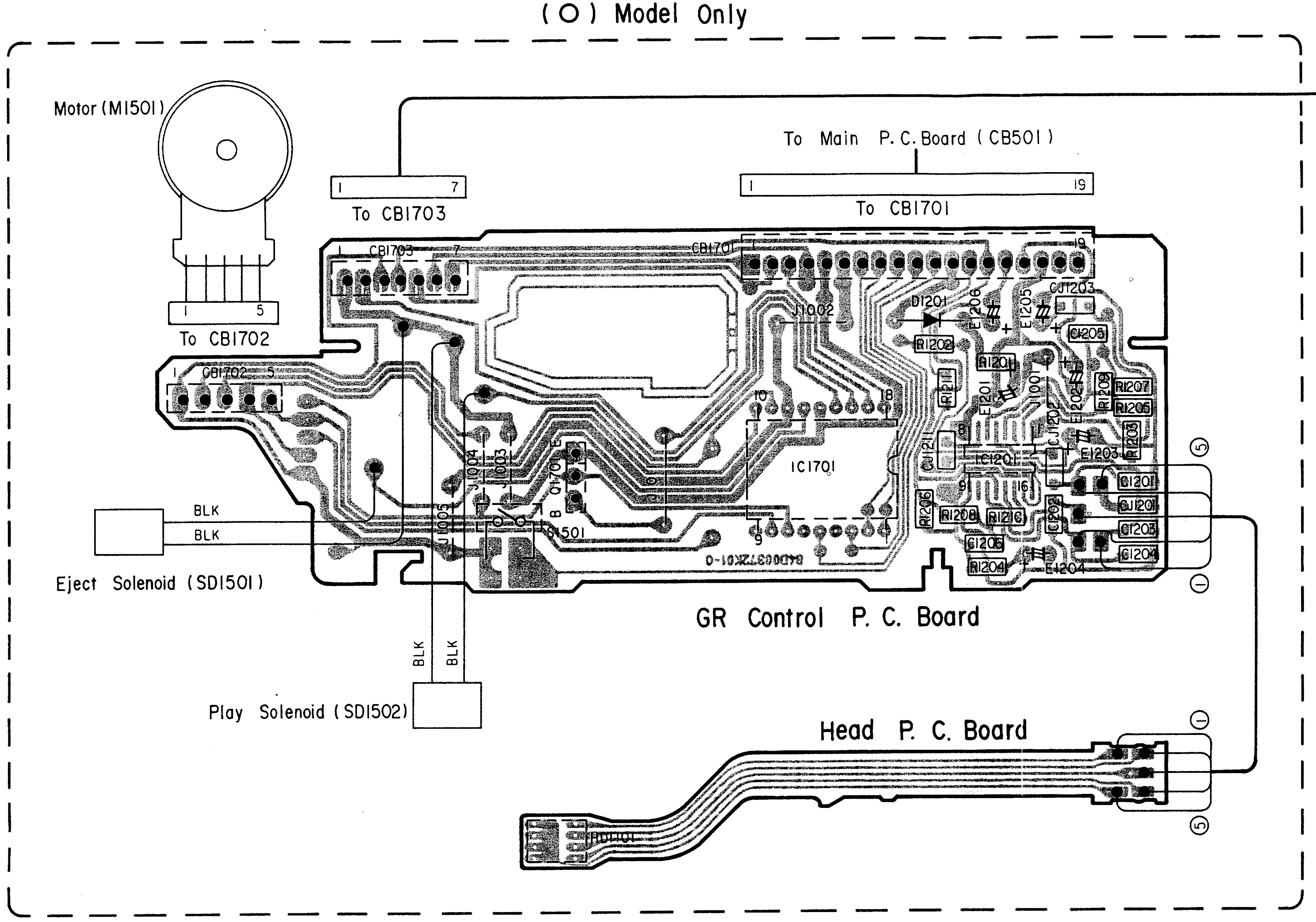
Main P.C.Board (Foil Side View)

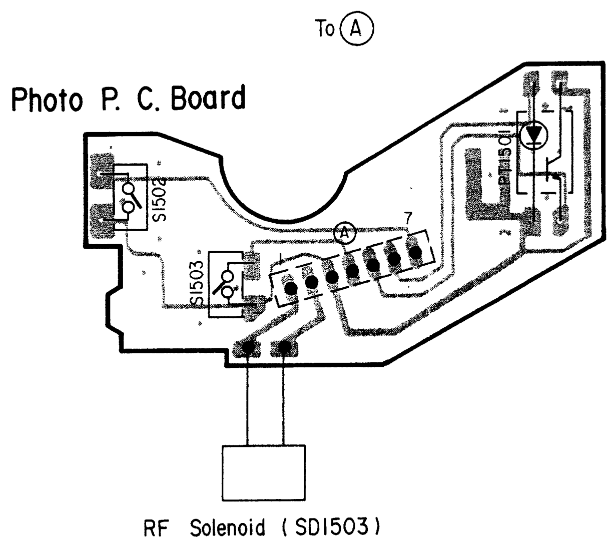


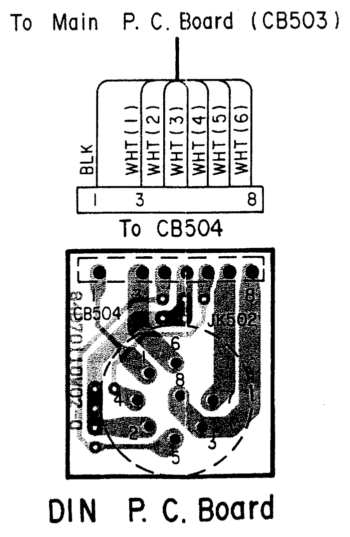
Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

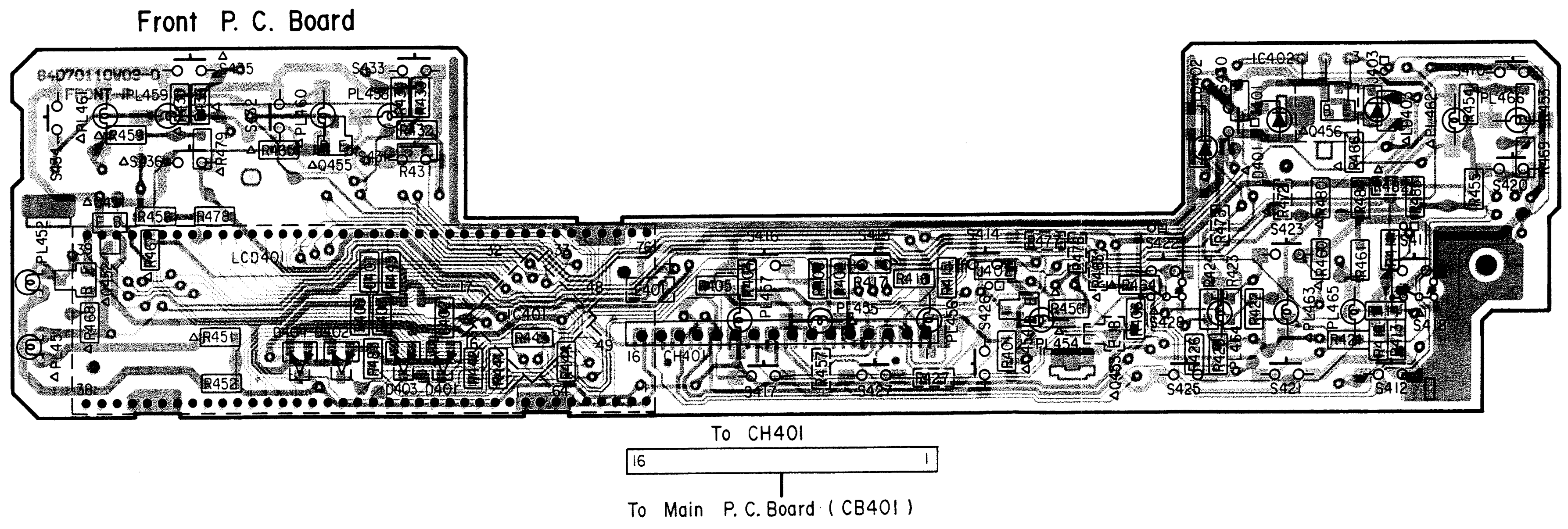
Parts Layout on P.C. Boards and Wiring Diagram (2/2)

All P.C. Boards viewed from soldered side.

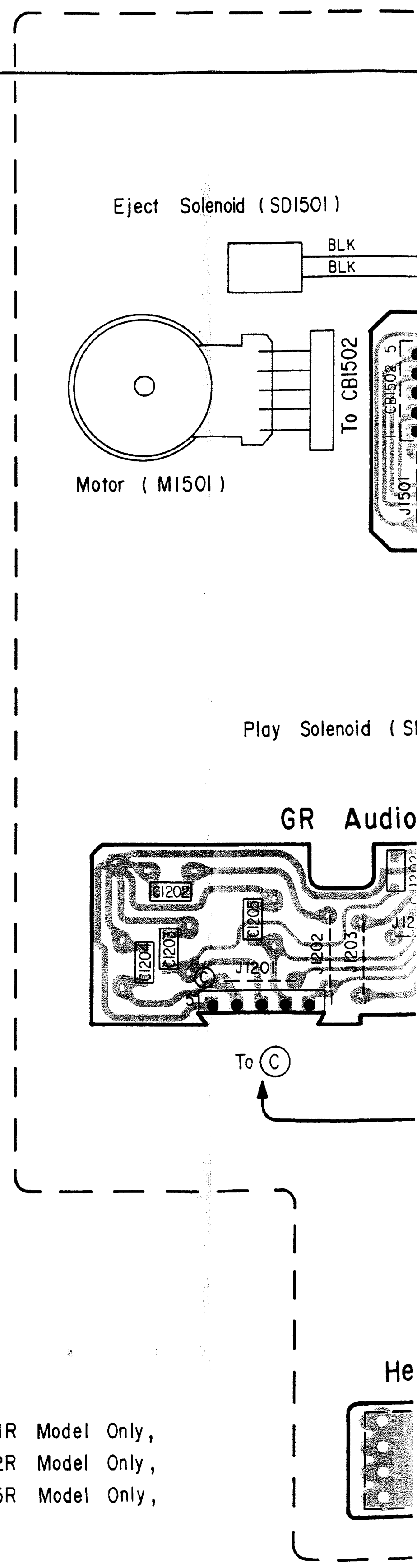

(○) Model Only
Motor (M1501)
To CB1702
To CB1703
To Main P.C. Board (CB501)
To CB1701
CB1703
CB1701
CB1702
IC1701
J1002
D1201
CJ1203
R1202
R1201
C1205
R1207
R1205
R1206
R1208
R1210
C1206
R1204
E1204
Q1201
Q1203
Q1204
S1501
BLK
Eject Solenoid (SD1501)
GR Control P. C. Board
Play Solenoid (SD1502)
Head P. C. Board
HD1701


To Ⓐ
Photo P. C. Board
S1502
S1503
PH1501
Ⓐ
7
RF Solenoid (SD1503)


To Main P. C. Board (CB503)
BLK
WHT (1)
WHT (2)
WHT (3)
WHT (4)
WHT (5)
WHT (6)
1
3
8
To CB504
CB504
JK502
DIN P. C. Board

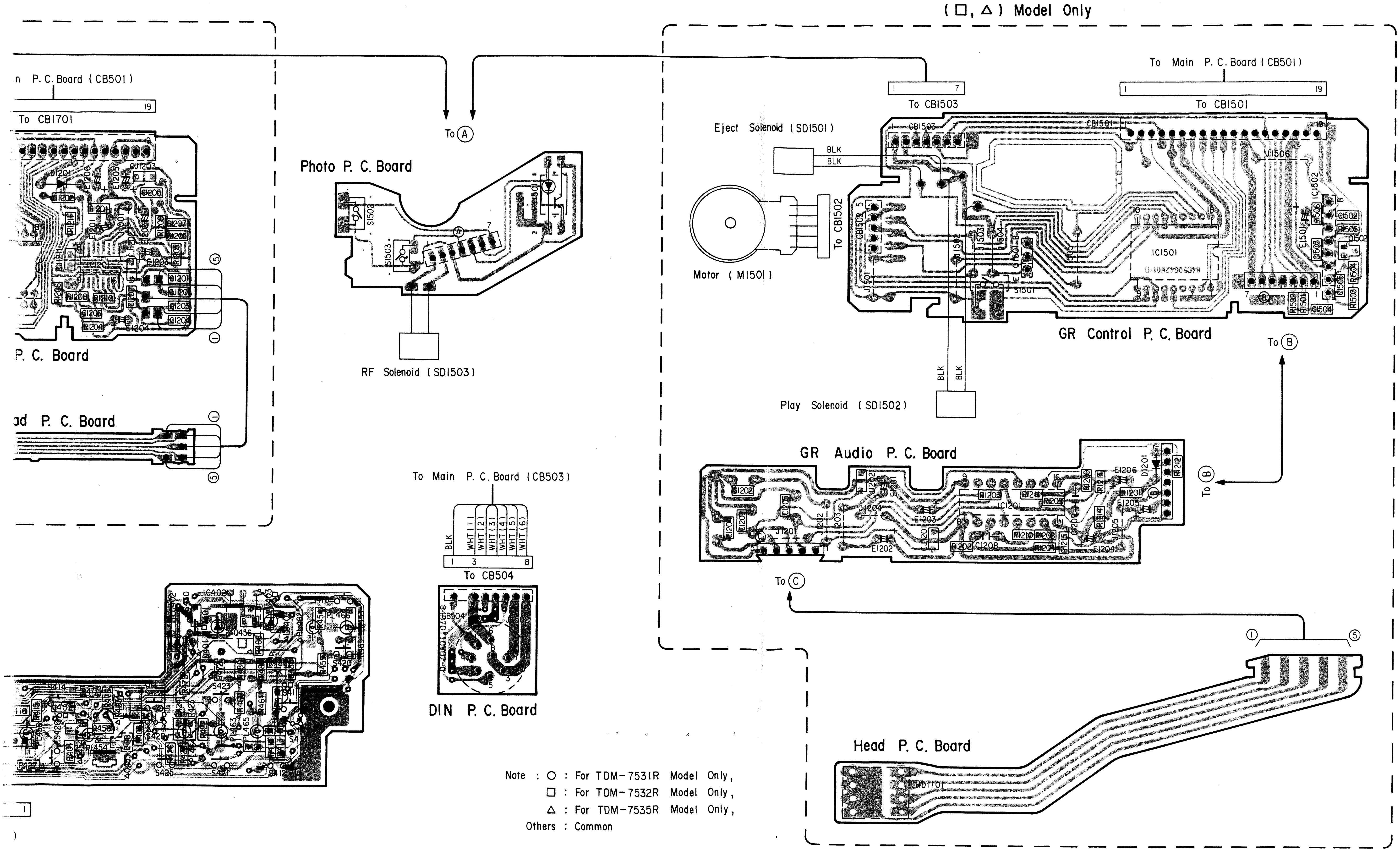

Front P. C. Board
LCD401
S435
S433
IC402
PL459
PL458
PL460
PL463
PL465
PL454
PL455
PL457
CH401
R451
R452
R453
S421
S425
S412
To CH401
16
1
To Main P. C. Board (CB401)

Note : ○ : For TDM-7531R Model Only,
□ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only,
Others : Common


Eject Solenoid (SD1501)
BLK
BLK
Motor (M1501)
To CB1502
CB1502
J1501
Play Solenoid (S
GR Audio
C1202
C1203
C1204
C1206
J1201
To Ⓒ
He

gram (2/2)

All P.C. Boards viewed from soldered side.



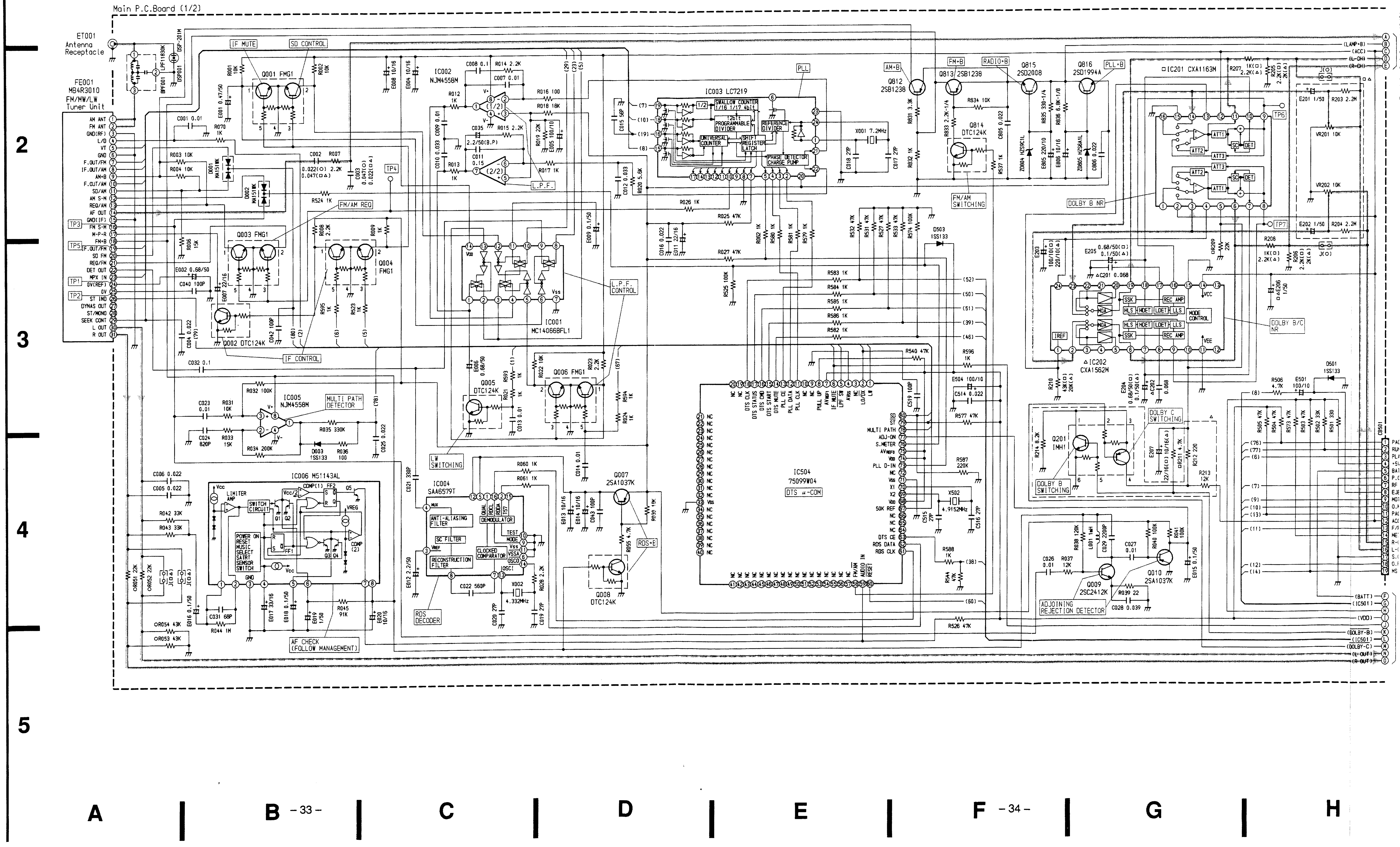
(□, △) Model Only
n P. C. Board (CB501)
To CB1701
P. C. Board
ad P. C. Board
To Ⓐ
Photo P. C. Board
S1502
S1503
RF Solenoid (SD1503)
To Main P. C. Board (CB503)
BLK
WHT (1)
WHT (2)
WHT (3)
WHT (4)
WHT (5)
WHT (6)
To CB504
DIN P. C. Board
To Main P. C. Board (CB501)
To CB1503
To CB1501
Eject Solenoid (SD1501)
BLK
BLK
To CB1502
Motor (M1501)
IC1501
J1506
GR Control P. C. Board
To Ⓑ
BLK
BLK
Play Solenoid (SD1502)
GR Audio P. C. Board
IC1201
To Ⓑ
To Ⓒ
Head P. C. Board

Note : ○ : For TDM-7531R Model Only,
□ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only,
Others : Common

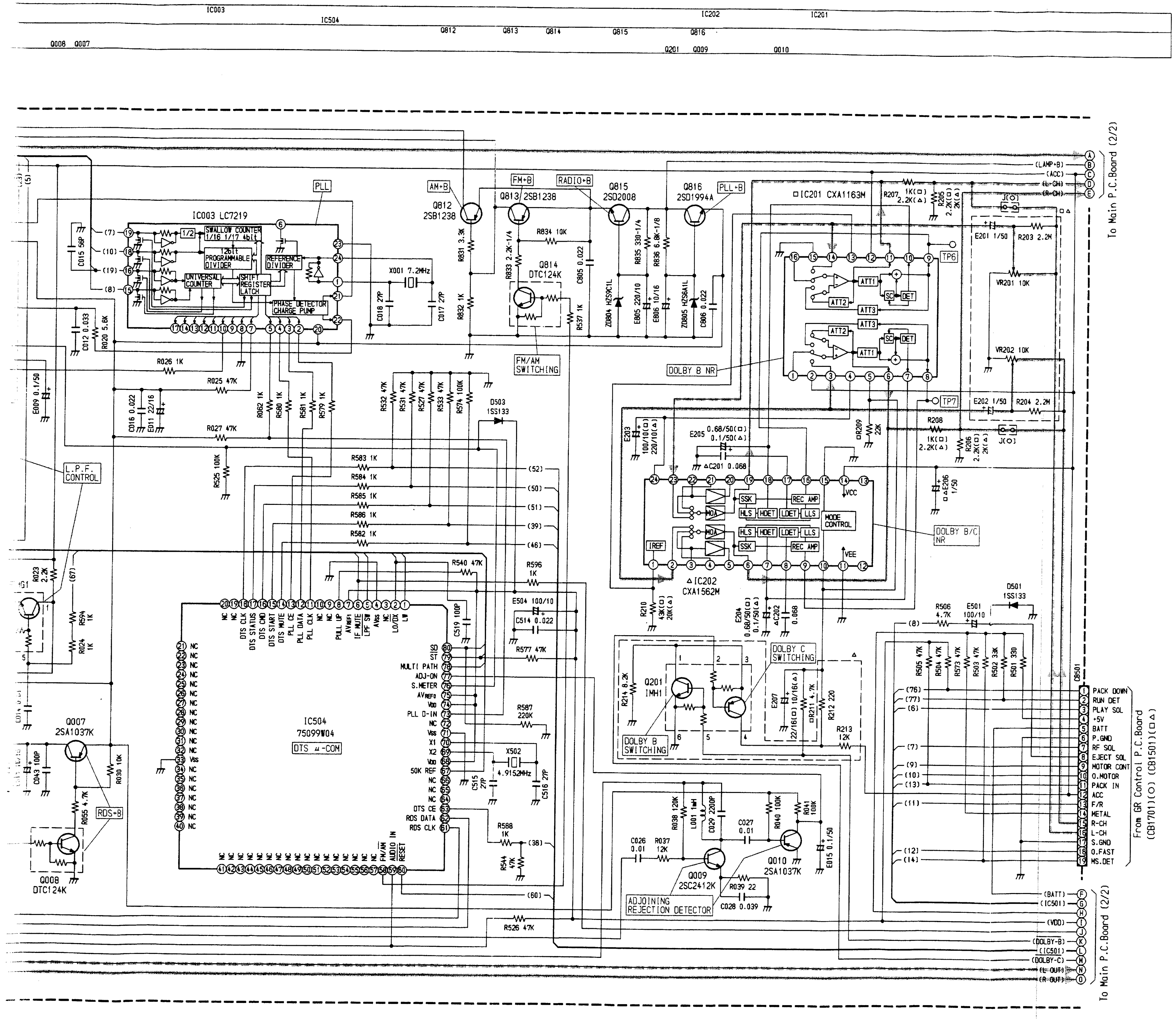
Orange Color Pattern : Component Side Pattern
Blue Color Pattern : Foil Side Pattern

Schematic Diagram (1/3)

IC	IC005 IC006 IC002 IC004 IC001 IC003 IC504 IC202 IC201
Transistor (Q)	Q001 Q002 Q003 Q004 Q005 Q006 Q008 Q007 Q812 Q813 Q814 Q815 Q816 Q201 Q009 Q010



1
2
3
4
5
A
B
C
D
E
F
G
H
Main P.C.Board (1/2)
ET001 Antenna Receptacle
FE001 MB4R3010 FM/MW/LW Tuner Unit
AM ANT
FM ANT
GND(RF)
L/D
VT
GND
F.OUT/FM
IF.OUT/AM
AM+B
F.OUT/AM
SD/AM
AM S-M
REG/AM
AF OUT
GND(IF)
FM S-M
M-P-R
FM+B
IF.OUT/FM
SD FM
REG/FM
DET OUT
MPX IN
0V(REF)
0V
ST IND
DYNAS OUT
ST/MONO
SEEK CONT
L OUT
R OUT
TP1
TP2
TP3
TP4
TP5
TP6
TP7
BPF001
LPF11830K
DSP001
DSP-201M
IF MUTE
SD CONTROL
Q001 FMG1
Q002 DTC124K
Q003 FMG1
Q004 FMG1
Q005 DTC124K
Q006 FMG1
Q007 2SA1037K
Q008 DTC124K
Q009 2SC2412K
Q010 2SA1037K
Q201 IMH1
D001 MA151WK
D002 MA151WK
D003 1SS133
FM/AM REQ
IF CONTROL
IC001 MC14066BFL1
IC002 NJM4558M
IC003 LC7219
IC004 SAA6579T
IC005 NJM4558M
IC006 M51143AL
IC201 CXA1163M
IC202 CXA1562M
IC504 75099W04
DTS µ-COM
L.P.F.
L.P.F. CONTROL
PLL
SWALLOW COUNTER 1/16 1/17 4bit
12bit PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
REFERENCE DIVIDER
PHASE DETECTOR CHARGE PUMP
X001 7.2MHz
MULTI PATH DETECTOR
LW SWITCHING
ANTI-ALIASING FILTER
SC FILTER
RECONSTRUCTION FILTER
DEMODULATOR
CLOCKED COMPARATOR
RDS DECODER
RDS+B
X002 4.332MHz
LIMITER AMP
SWITCH CIRCUIT
POWER ON RESET MUSIC SELECT SATRT SENSOR SWITCH
COMP(1)
COMP(2)
FF1
FF2
VREG
AF CHECK (FOLLOW MANAGEMENT)
AM+B
FM+B
RADIO+B
PLL+B
Q812 2SB1238
Q813 2SB1238
Q814 DTC124K
Q815 2SD2008
Q816 2SD1994A
FM/AM SWITCHING
D503 1SS133
X502 4.9152MHz
DOLBY B NR
DOLBY B/C NR
DOLBY C SWITCHING
DOLBY B SWITCHING
ADJOINING REJECTION DETECTOR
REC AMP
MODE CONTROL
IREF
VR201 10K
VR202 10K
D501 1SS133
CB501
(LAMP+B)
(ACC)
(L-CH)
(R-CH)
(BATT)
(IC501)
(VDD)
(DOLBY-B)
(DOLBY-C)
(L-OUT)
(R-OUT)


IC003 LC7219
SWALLOW COUNTER 1/16 1/17 4bit
12bit PROGRAMMABLE DIVIDER
REFERENCE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
PHASE DETECTOR CHARGE PUMP
PLL
X001 7.2MHz
AM+B
FM+B
RADIO+B
PLL+B
Q812 2SB1238
Q813 2SB1238
Q814 DTC124K
Q815 2SD2008
Q816 2SD1994A
FM/AM SWITCHING
DOLBY B NR
IC201 CXA1163M
ATT1
ATT2
ATT3
DET
TP6
TP7
VR201 10K
VR202 10K
IC202 CXA1562M
DOLBY B/C NR
MODE CONTROL
REC AMP
IREF
D503 1SS133
D501 1SS133
L.P.F. CONTROL
IC504 75099W04 DTS μ-COM
X502 4.9152MHz
Q201 IMH1
DOLBY B SWITCHING
DOLBY C SWITCHING
Q009 2SC2412K
Q010 2SA1037K
ADJOINING REJECTION DETECTOR
Q007 2SA1037K
Q008 DTC124K
RDS+B
To Main P.C.Board (2/2)
From GR Control P.C.Board (CB1701)(○) (CB1501)(□△)
PACK DOWN
RUN DET
PLAY SOL
+5V
BATT
P.GND
RF SOL
EJECT SOL
MOTOR CONT
O.MOTOR
PACK IN
ACC
F/R
METAL
R-CH
L-CH
S.GND
O.FAST
MS.DET
(LAMP+B)
(ACC)
(L-CH)
(R-CH)
(BATT)
(IC501)
(VDD)
(DOLBY-B)
(DOLBY-C)
(L-OUT)
(R-OUT)

IC001

		MODE			MODE
1	2.2V/4.2V	RDS ON/OFF	8	2.4V	FM
2	4.2V	VT	9	2.4V	FM
3	4.2V	VT	10	0V/2.3V	SEEK ON/OFF
4	2.2V/5.1V	RDS ON/OFF	11	0V	FM
5	9.4V/0V	RDS ON/OFF	12	9.4V	FM
6	9.4V	FM	13	0V/8.6V	FM/AM
7	0V		14	9.4V	

IC002

		MODE
1	4.2V	FM
2	2.7V	FM
3	2.7V	FM
4	0V	
5	2.7V	FM
6	2.7V	FM
7	2.2V/4.2V	RDS ON/OFF
8	9.4V	

IC004

		MODE			MODE
1	—		9	0V	
2	5V	FM	10	0V	
3	2.4V	FM	11	0V	
4	2.4V	FM	12	4.9V	
5	4.8V		13	2.3V	X'TAL
6	0V		14	2.4V	X'TAL
7	2.4V	FM	15	—	
8	2.4V	FM	16	4.8V	FM

IC003

		MODE			MODE
1	0V	X'TAL	13	—	
2	4.9V	SEEK ON	14	—	
3	4.9V	SEEK ON	15	2.8V	MW/LW
4	4.9V	SEEK ON	16	0V	FM
5	4.7V	SEEK ON	17	—	
6	—		18	2.5V	MW/LW
7	4.8V	FM	19	2.6V	FM
8	0V		20	4.8V	
9	—		21	2.7V	FM
10	4.8V	FM	22	2.7V	FM
11	—		23	0V	
12	—		24	2.5V	X'TAL

IC005

		MODE
1	4.8V	FM
2	4.8V	FM
3	4.8V	FM
4	0V	
5	—	
6	—	
7	—	
8	9V	

IC006

		MODE
1	1.4V	FM
2	1.4V	FM
3	0V	
4	1.3V	FM
5	0V	FM
6	0V/8.9V	MOD. ON/OFF
7	0V/5V	MOD. ON/OFF
8	9V	

□IC201

		MODE
1	—	
2	9.2V	
3	SIG.	R OUT
4	4.7V	TAPE
5	3.6V/0V	DOLBY OFF/B
6	SIG.	R OUT
7	0.38V/0.56V	DOLBY OFF/B
8	4.9V	TAPE
9	4.9V	TAPE
10	0.36V/0.7V	DOLBY OFF/B
11	SIG.	L OUT
12	9.5V	
13	1.2V	TAPE
14	SIG.	L OUT
15	0V	
16	—	

△IC202

		MODE			MODE
1	1.2V	TAPE	13	—	
2	SIG.	R OUT	14	9.4V	
3	—		15	0V	
4	—		16	4.7V	TAPE
5	—		17	0.36V/0.64V/0.7V	DOLBY NR/B/C
6	SIG.	R OUT	18	0.36V/0.64V/0.7V	DOLBY NR/B/C
7	0.36V/0.64V/0.7V	DOLBY NR/B/C	19	SIG.	L OUT
8	0.36V/0.64V/0.7V	DOLBY NR/B/C	20	—	
9	4.7V	TAPE	21	—	
10	0V/4.6V/8.3V	DOLBY NR/B/C	22	—	
11	0V		23	SIG.	L IN
12	—		24	4.7V	TAPE

IC504

		MODE			MODE
1	5V	LW	63	5V	FM
2	5V/0V	LO/DX	64	—	
3	—		65	—	
4	0V		66	—	
5	5V	FM	67	5V/0V	RDS ON/OFF
6	0V	FM	68	5V	
7	5V	FM	69	PS	X'TAL
8	5V	FM	70	PS	X'TAL
9	—	FM	71	0V	
10	—	FM	72	—	
11~18	0V~5V	FM	73	4.7V	SEEK ON
19~32	—		74	5V	
33	0V		75	5V	
34~57	—		76	0V	FM
58	5V/0V	FM/AM	77	5V	FM
59	5V	A-IN	78	5V	FM
60	0V/5V	RESET ON/OFF	79	0V/5V	ST/MONO
61	5V	FM	80	0V	FM
62	5V	FM			

	B	C	E	MODE
Q002	3.6V	0V	0V	FM
Q005	4.7V/0V	0V/0V	0V/0V	LW ON/OFF
Q007	4.2V	4.8V	4.9V	FM
Q008	9V	0V	0V	FM
Q009	0.9V	8.6V	0V	FM
Q010	4.8V	0V	4.8V	FM
Q812	9V/8.5V	0V/9V	9.1V/9.1V	FM/AM
Q813	8.4V/9.1V	9V/0.7V	9V/9.1V	FM/AM
Q814	4.8V/0V	0V/9V	0V/0V	FM/AM
Q815	9.6V	13.6V	9.1V	TUNER
Q816	5.5V	13.6V	4.9V	TUNER

Q001

		MODE
1	0V/9.5V	SEEK ON/OFF
2	0V/9.5V	SEEK ON/OFF
3	3V/0V	SEEK ON/OFF
4	0V	
5	3V/0V	SEEK ON/OFF

Q003

		MODE
1	7.8V/0V	REQ ON/OFF
2	1V/0V	REQ ON/OFF
3	0V/4.5V	REQ ON/OFF
4	0V	
5	0V/4.5V	REQ ON/OFF

Q004

		MODE
1	0V/4V	IF MUTE ON/OFF
2	3V/0V	SEEK ON/OFF
3	0V/5V	SEEK ON/OFF
4	0V	
5	4.2V/0V	IF MUTE ON/OFF

Q006

		MODE
1	0V/8.7V	RDS ON/OFF
2	8.8V/0V	RDS ON/OFF
3	0V/8.7V	RDS ON/OFF
4	0V	
5	4.7V/0V	RDS ON/OFF

△Q201

		MODE
1	0V/3.7V/0V	DOLBY OFF/B/C
2	4.9V/4.9V/0V	DOLBY OFF/B/C
3	0V/4.3V/8.2V	DOLBY OFF/B/C
4	5V/0V/5V	DOLBY OFF/B/C
5	0V	DOLBY OFF/B/C
6	0V	

[Measuring Conditions]

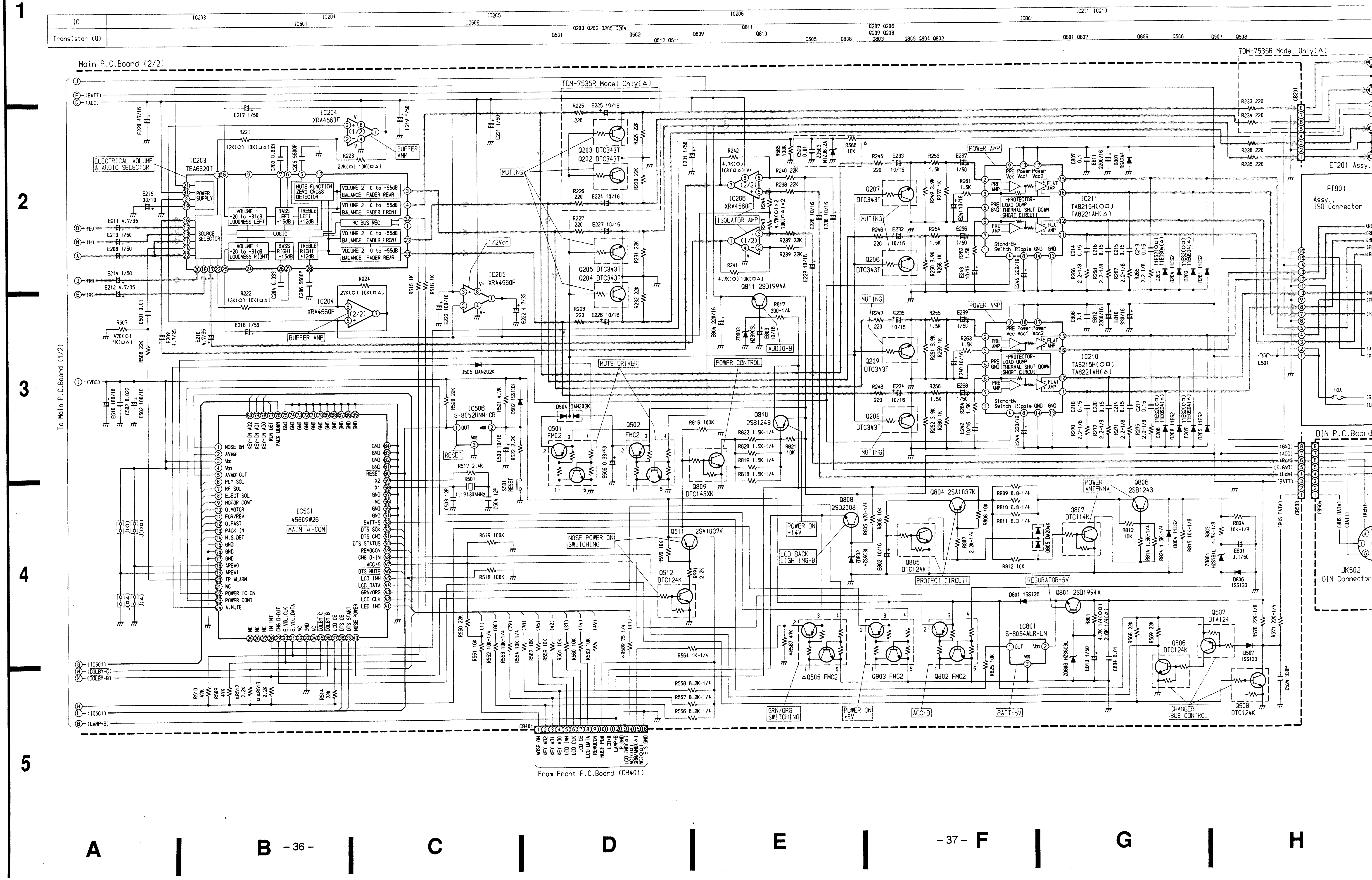
- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : FM : 98.1MHz, 1W Output
  MW : 999kHz, 0.16W Output
  LW : 216kHz, 0.16W Output
  TAPE : MTT-212, 1W Output

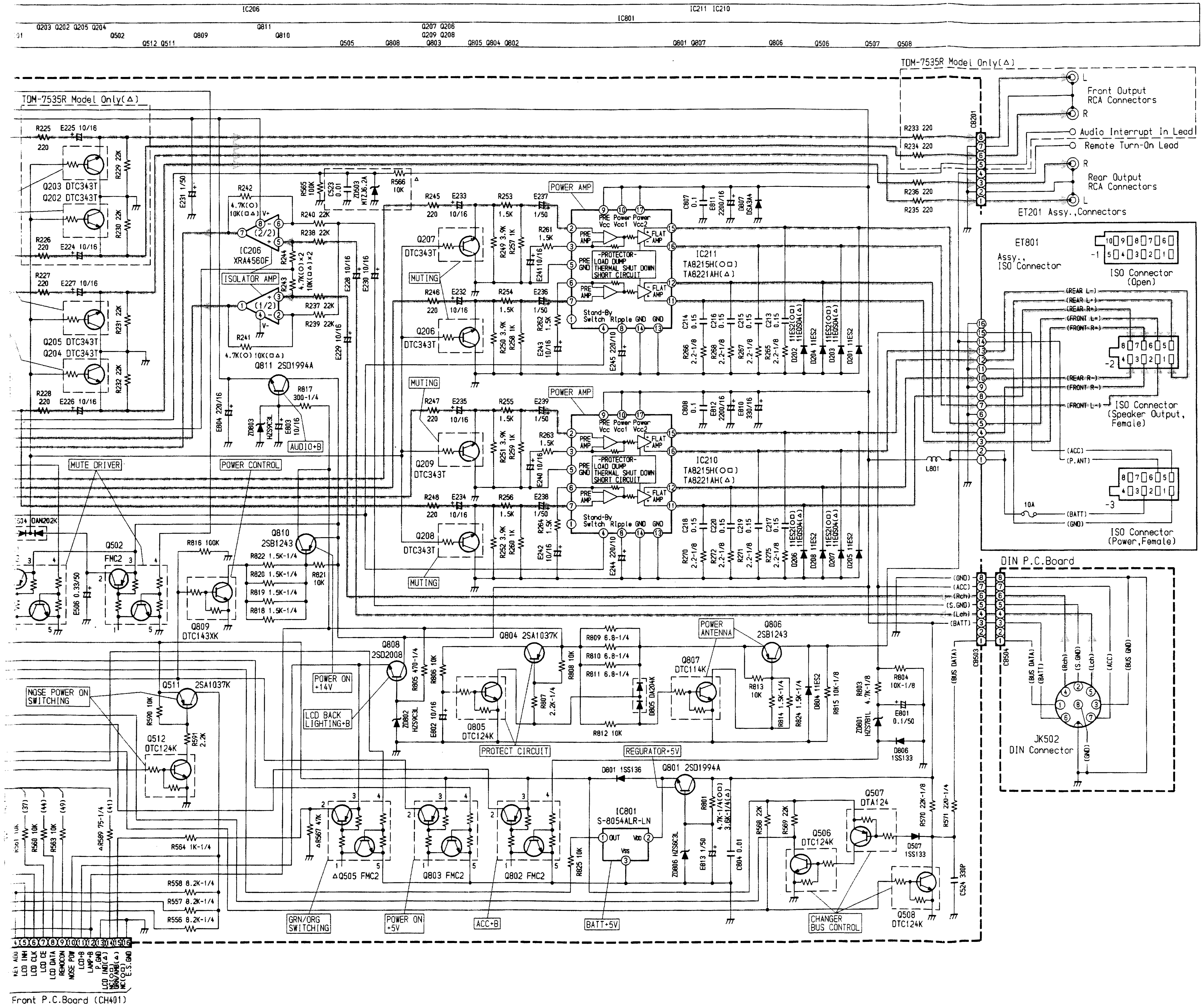
Note : ○ : For TDM-7531R Model Only,
□ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only,
Others :Common.

NOTES:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (2/3)


1
2
3
4
5
A
B
C
D
E
F
G
H
IC
Transistor (Q)
IC203
IC501
IC204
IC506
IC205
IC206
IC801
IC211 IC210
Main P.C.Board (2/2)
TDM-7535R Model Only(△)
To Main P.C.Board (1/2)
(BATT)
(ACC)
(VDD)
(IC501)
(DOLBY-C)
(DOLBY-B)
(LAMP+B)
ELECTRICAL VOLUME & AUDIO SELECTOR
IC203 TEA6320T
POWER SUPPLY
SOURCE SELECTOR
LOGIC
VOLUME 1 +20 to -31dB LOUDNESS LEFT
VOLUME 1 +20 to -31dB LOUDNESS RIGHT
BASS LEFT ±15dB
BASS RIGHT ±15dB
TREBLE LEFT ±12dB
TREBLE RIGHT ±12dB
MUTE FUNCTION ZERO CROSS DETECTOR
VOLUME 2 0 to -55dB BALANCE FADER REAR
VOLUME 2 0 to -55dB BALANCE FADER FRONT
I²C BUS REC
IC204 XRA4560F
BUFFER AMP
IC205 XRA4560F
1/2Vcc
MUTING
Q203 DTC343T
Q202 DTC343T
Q205 DTC343T
Q204 DTC343T
MUTE DRIVER
POWER CONTROL
IC206 XRA4560F
ISOLATOR AMP
Q811 2SD1994A
AUDIO+B
Q207 DTC343T
Q206 DTC343T
Q209 DTC343T
Q208 DTC343T
POWER AMP
PRE AMP
FLAT AMP
PROTECTOR- LOAD DUMP THERMAL SHUT DOWN SHORT CIRCUIT
Stand-By Switch Ripple GND GND
IC211 TA8215H(○□) TA8221AH(△)
IC210 TA8215H(○□) TA8221AH(△)
L801
10A
ET201 Assy.
ET801 Assy., ISO Connector
DIN P.C.Board
JK502 DIN Connector
IC501 45609W26
MAIN μ-COM
IC506 S-8052HNM-CR
RESET
X501 4.194304MHz
D505 DAN202K
D504 DAN202K
Q501 FMC2
Q502 FMC2
Q809 DTC143XK
Q810 2SB1243
Q808 2SD2008
Q804 2SA1037K
Q805 DTC124K
Q807 DTC114K
Q806 2SB1243
POWER ANTENNA
POWER ON +14V
LCD BACK LIGHTING+B
PROTECT CIRCUIT
NOSE POWER ON SWITCHING
Q511 2SA1037K
Q512 DTC124K
REGURATOR+5V
Q801 2SD1994A
IC801 S-8054ALR-LN
Q505 FMC2
Q803 FMC2
Q802 FMC2
Q506 DTC124K
Q507 DTA124
Q508 DTC124K
GRN/ORG SWITCHING
POWER ON +5V
ACC+B
BATT+5V
CHANGER BUS CONTROL
CB401
From Front P.C.Board (CH401)
NOSE ON
KEY AD2
KEY AD1
KEY AD0
LCD INH
LCD CLK
LCD CE
LCD DATA
REMOCON
NOSE POW
LCD+B
LAMP+B
P.GND
LCD IND(△)
GRN/AMB(△)
NC(○□)
E.S.GND
NOSE ON
AVREF
VDD
VDD
AVREF OUT
PLY SOL
RF SOL
EJECT SOL
MOTOR CONT
O.MOTOR
FOR/REV
O.FAST
PACK IN
M.S.DET
GND
GND
GND
AREA0
AREA1
TP ALARM
NC
POWER IC ON
POWER CONT
A.MUTE
GND
GND
GND
RESET
X2
X1
GND
NC
GND
GND
BATT+5
DTS SCK
DTS CMD
DTS STATUS
REMOCON
CHG D-IN
ACC+5
DTS MUTE
LCD INH
LCD DATA
GRN/ORG
LCD CE
LCD CLK
LED IND
(GND)
(ACC)
(Rch)
(S.GND)
(Lch)
(BATT)
(BUS DATA)


IC206
IC801
IC211 IC210
TDM-7535R Model Only(△)
Front Output
RCA Connectors
Audio Interrupt In Lead
Remote Turn-On Lead
Rear Output
RCA Connectors
ET201 Assy.,Connectors
ET801
Assy.,
ISO Connector
ISO Connector
(Open)
ISO Connector
(Speaker Output,
Female)
ISO Connector
(Power,Female)
DIN P.C.Board
JK502
DIN Connector
IC206
XRA4560F
ISOLATOR AMP
POWER AMP
MUTING
PRE AMP
-PROTECTOR-
LOAD DUMP
THERMAL SHUT DOWN
SHORT CIRCUIT
FLAT AMP
Stand-By Switch
Ripple
IC211
TA8215H(○□)
TA8221AH(△)
IC210
TA8215H(○□)
TA8221AH(△)
Q203 DTC343T
Q202 DTC343T
Q205 DTC343T
Q204 DTC343T
Q207 DTC343T
Q206 DTC343T
Q209 DTC343T
Q208 DTC343T
Q811 2SD1994A
AUDIO+B
MUTE DRIVER
POWER CONTROL
Q502 FMC2
Q810 2SB1243
Q809 DTC143XK
NOSE POWER ON SWITCHING
Q511 2SA1037K
Q512 DTC124K
POWER ON +14V
LCD BACK LIGHTING+B
Q808 2SD2008
Q804 2SA1037K
Q805 DTC124K
PROTECT CIRCUIT
POWER ANTENNA
Q806 2SB1243
Q807 DTC114K
REGURATOR+5V
Q801 2SD1994A
IC801
S-8054ALR-LN
△Q505 FMC2
Q803 FMC2
Q802 FMC2
Q506 DTC124K
Q507 DTA124
Q508 DTC124K
GRN/ORG SWITCHING
POWER ON +5V
ACC+B
BATT+5V
CHANGER BUS CONTROL
Front P.C.Board (CH401)
L801
10A
(BATT)
(GND)
(ACC)
(P.ANT)
(Rch)
(S.GND)
(Lch)
(BUS DATA)
(BUS GND)

IC203

		MODE			MODE
1	4.8V	DATA	17	SIG.	CD
2	0V		18	SIG.	TAPE
3	SIG.	REAR・L	19	SIG.	FM
4	SIG.	FRONT・L	20	SIG.	FM
5	4.5V	FM	21	4.7V	FM
6	4.5V	FM	22	SIG.	MW/LW
7	4.6V	FM	23	4.7V	FM
8	4.5V	FM	24	—	
9	—		25	4.6V	FM
10	4.6V	FM	26	4.7V	FM
11	SIG.	MW/LW	27	4.7V	FM
12	—		28	4.7V	FM
13	SIG.	FM	29	SIG.	FRONT・R
14	SIG.	TP・ALM	30	SIG.	REAR・R
15	SIG.	TAPE	31	9.3V	
16	SIG.	CD	32	4.8V	CLK

IC204

		MODE
1	4.7V	FM
2	4.7V	FM
3	4.7V	FM
4	0V	
5	4.7V	FM
6	4.7V	FM
7	4.7V	FM
8	9.4V	

IC205

		MODE
1	4.7V	FM
2	4.7V	FM
3	4.7V	FM
4	0V	
5	—	
6	—	
7	—	
8	9.4V	

IC210, IC211

		MODE
1	—	
2	SIG.	L IN
3	5.1V	FM
4	5V	STBY
5	0V	
6	5.1V	FM
7	SIG.	R IN
8	5.2V	FM
9	13.8V	FM
10	13.8V	FM
11	SIG.	R OUT
12	SIG.	R OUT
13	0V	
14	0V	
15	SIG.	L OUT
16	SIG.	L OUT
17	13.8V	

IC206

		MODE			MODE
1	SIG.	CD	5	SIG.	CD
2	SIG.	CD	6	SIG.	CD
3	SIG.	CD	7	SIG.	CD
4	0V		8	9.4V	

IC501

		MODE			MODE			MODE			MODE
1	2.5V/5V	NOSE ON/OFF	21	—		41	5V/0V	SW ON/OFF	61	0V	
2	4.8V		22	5V/0V	POW ON/OFF	42	5V	LCD CLK	62	0V	
3	4.9V		23	5V/0V	POW ON/OFF	43	0V/5V	GRN/ORG	63	0V	
4	4.9V		24	5V/0V	MUTE ON/OFF	44	5V	LCD DATA	64	0V	
5	4.8V		25	—		45	5V	LCD INH	65	0V	
6	4.9V	TAPE	26	—		46	5V	DTS MUTE	66	0V	
7	4.9V	EJECT	27	—		47	5V	ACC+B	67	0V	
8	4.9V	EJECT	28	5.7V/0V	IN-INT ON/OFF	48	0V	CHANG IN	68	0V	
9	5V	TAPE	29	0V	CHANG OUT	49	5V	REMOCON	69	0V	
10	5V	TAPE	30	5V	EV-CLK	50	5V	DTS STS	70	0V	
11	5V/0V	FOW/REV	31	5V	EV-DATA	51	0V	DTS CMD	71	0V	
12	0V/5V	PLAY/FF・REV	32	—		52	5V	DTS SCK	72	0V	
13	5V	PACK IN	33	0V		53	5V	BATT+5	73	0V	
14	5V	M.S.	34	—		54	0V		74	0V	
15	0V		35	0V	DOLBY-C	55	0V	FM	75	0V	
16	0V		36	0V	DOLBY-B	56	—		76	5V	TAPE
17	0V		37	5V	LCD CE	57	0V		77	2.5V	FF
18	0V		38	5V	DTS CE	58	PS	X'TAL	78	5V	
19	0V		39	5V	DTS. START	59	PS	X'TAL	79	5V	
20	5V	TP. OFF ALM	40	5V	NOSE POW	60	0V/5V	RESET ON/OFF	80	5V	

Q501

		MODE
1	—	
2	13.8V/0V	MUTE ON/OFF
3	13.8V	MUTE ON/OFF
4	5V/0V	MUTE ON/OFF
5	0V	

Q502

		MODE
1	—	
2	13.8V/0V	IF MUTE ON/OFF
3	13.8V/13.8V	IF MUTE ON/OFF
4	5V/0V	IF MUTE ON/OFF
5	0V	

△Q505

		MODE
1	—	
2	0V/9.1V	GRN/ORG
3	9.2V/9.2V	GRN/ORG
4	0V/5V	GRN/ORG
5	0V	

IC506

		MODE
1	5V/0V	RESET OFF/ON
2	5V/1.7V	RESET OFF/ON
3	0V	

Q802

		MODE
1	—	
2	5V/0V	ACC ON/OFF
3	5V/5.4V	ACC ON/OFF
4	6V/0V	ACC ON/OFF
5	0V	

Q803

		MODE
1	—	
2	5V/0V	POW ON/OFF
3	5V/5V	POW ON/OFF
4	5V/0V	POW ON/OFF
5	0V	

IC801

		MODE
1	5V	FM
2	5V	FM
3	0V	

	B	C	E	MODE		B	C	E	MODE
△Q202	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q511	4.8V	5V	5V	
△Q203	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q512	4.8V	0V	0V	
Q204	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q801	6.3V	13.8V	5.6V	
Q205	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q804	13.7V	0V	13.7V	POW ON
Q206	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q805	0V	13.6V	0V	POW ON
Q207	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q806	13V	13.6V	13.6V	POW ON
Q208	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q807	0V	7V	0V	POW ON
Q209	0V/13.8V	0V/0V	0V/0V	MUTE ON/OFF	Q808	9.8V	13.8V	9.2V	POW ON
Q506	PS	4.9V	0V	CHANG IN	Q809	4.1V	0V	0V	POW ON
Q507	PS	0V	5V	CHANG IN	Q810	13V	13.6V	13.7V	POW ON
Q508	PS	0V	0V	CHANG IN	Q811	10V	13.8V	9.5V	POW ON

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : FM : 98.1MHz, 1W Output
  MW : 999kHz, 0.16W Output
  LW : 216kHz, 0.16W Output
  TAPE : MTT-212, 1W Output

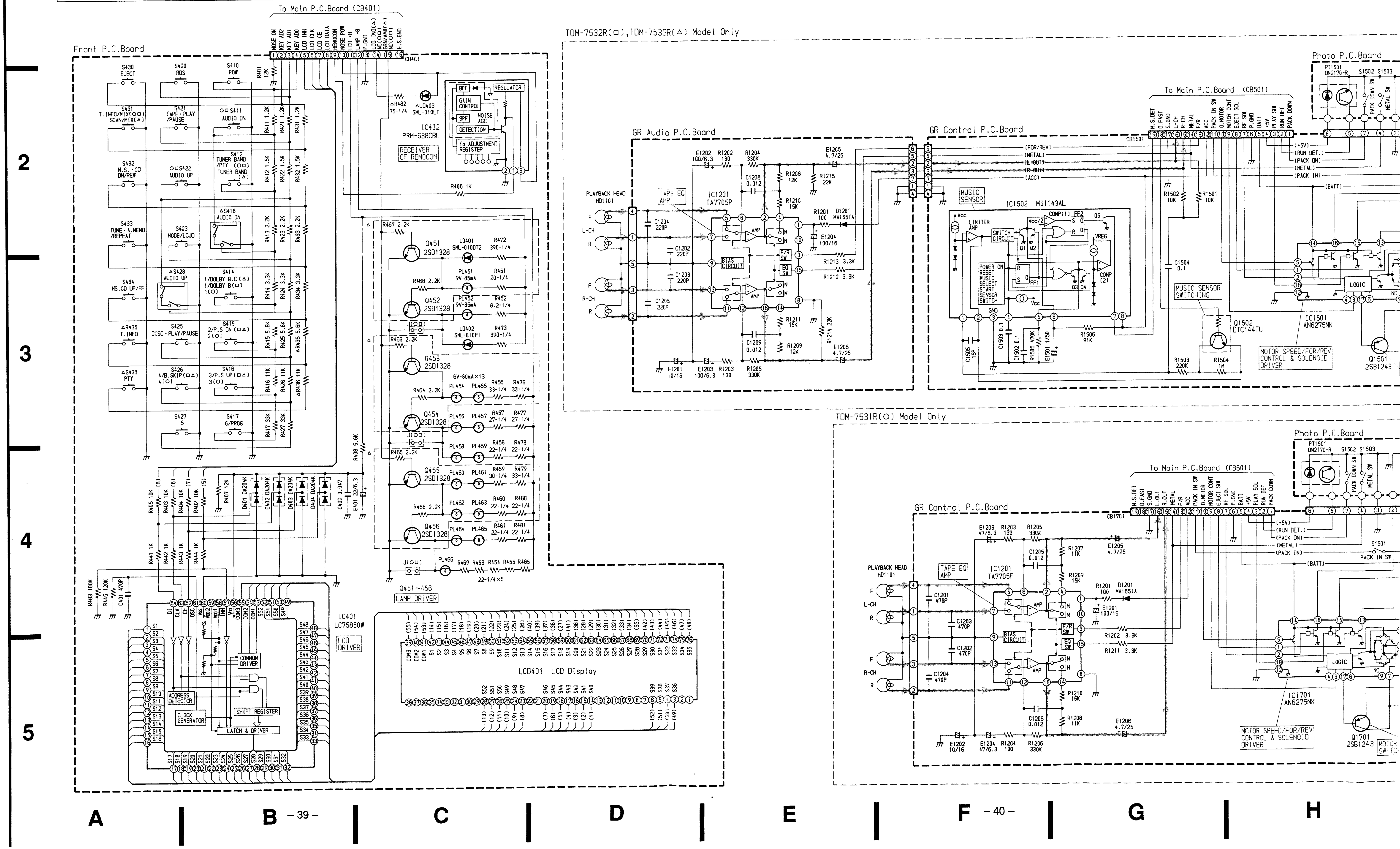
Note : ○ : For TDM-7531R Model Only,
□ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only,
Others :Common.

NOTES:

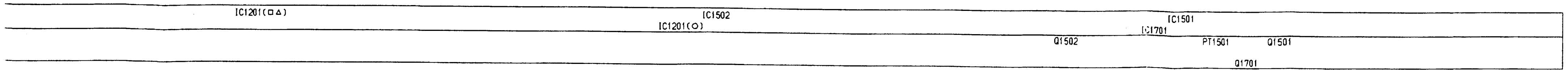
1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Schematic Diagram (3/3)

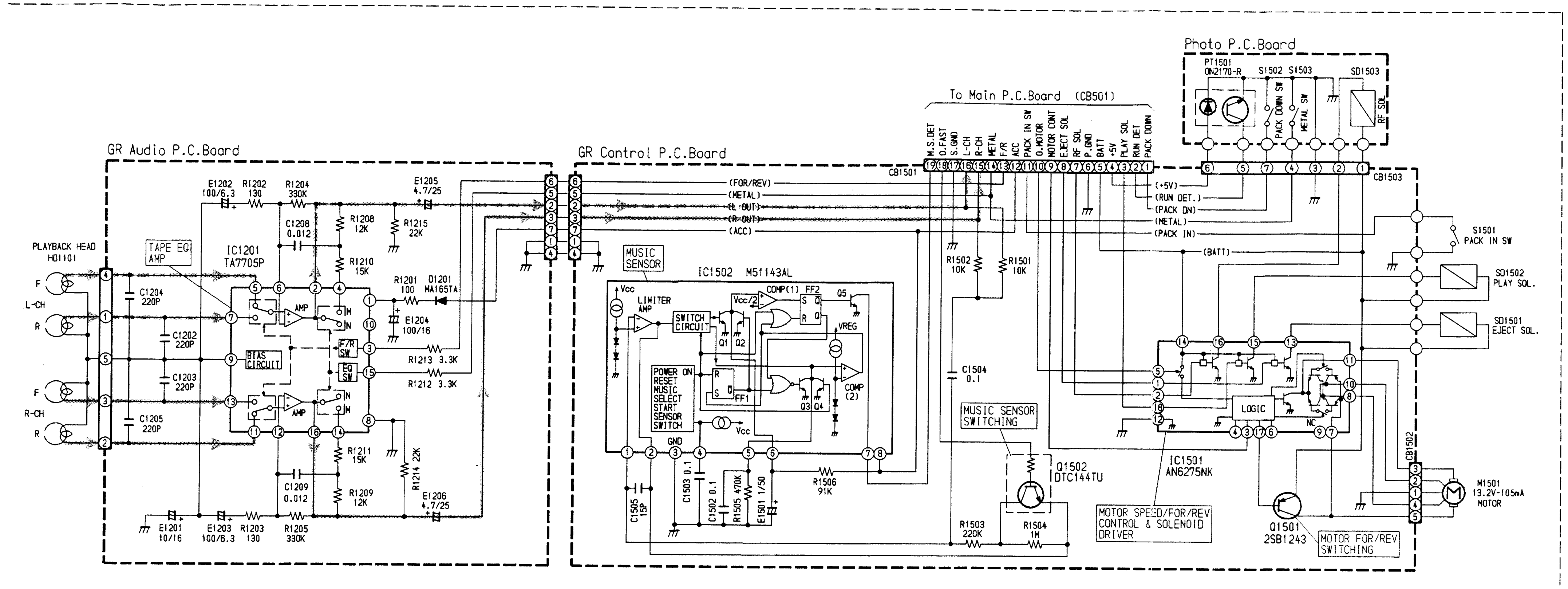
IC	IC401 IC402	IC1201(□△)	IC1201(○) IC1502	IC1701 IC1501
Transistor (Q,PT)	Q451 Q452 Q453 Q454 Q455 Q456		Q1502	PT1501 Q1501 Q1701



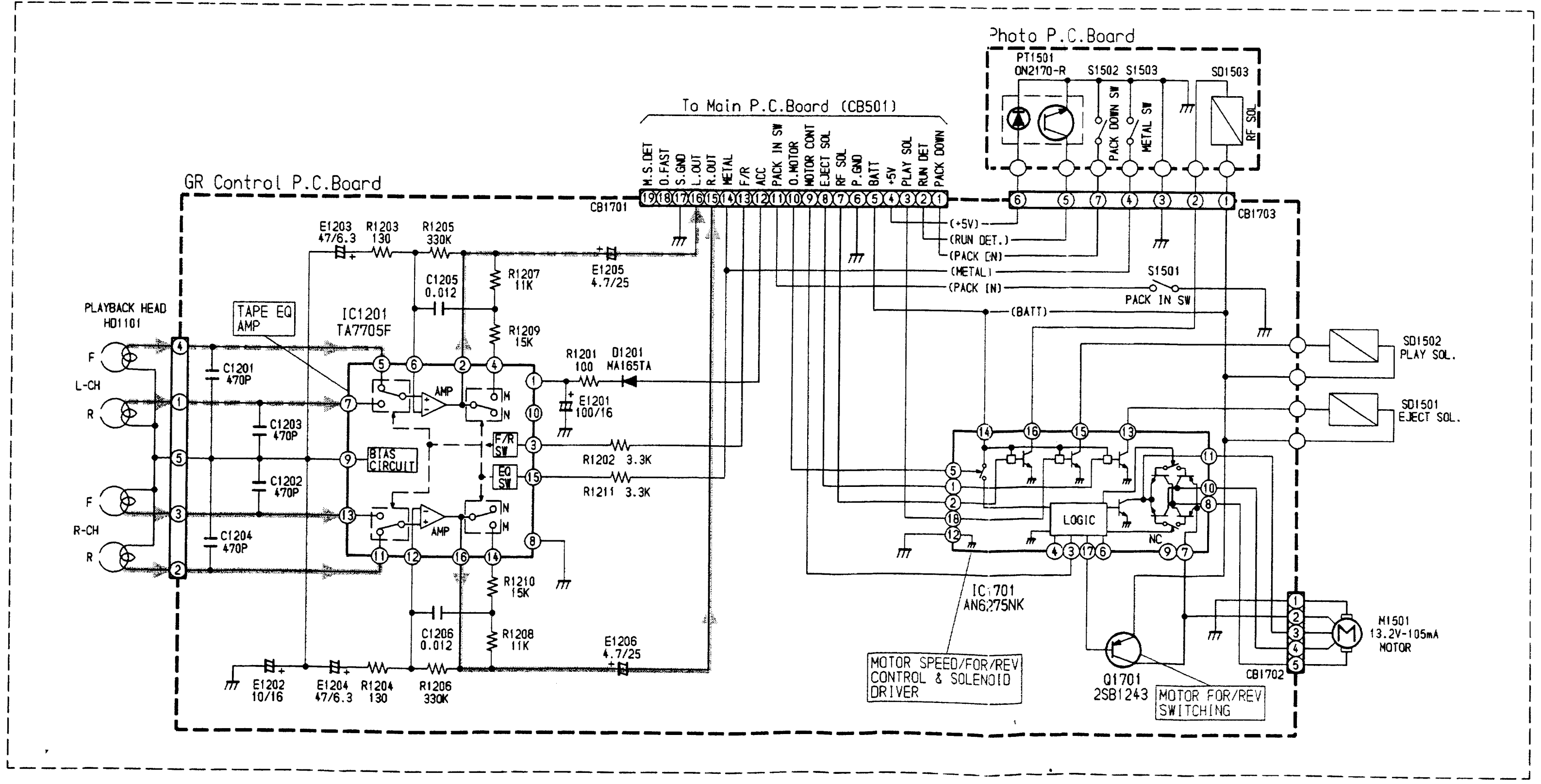
1
2
3
4
5
A
B
C
D
E
F
G
H
To Main P.C.Board (CB401)
Front P.C.Board
CH401
NOSE ON
KEY AD2
KEY AD1
KEY AD0
LCD INH
LCD CLK
LCD CE
LCD DATA
REMOCON
NOSE POW
LCD +B
LAMP +B
P.GND
LCD IND(△)
NC(○□)
GRN/AMB(△)
NC(○□)
E.S.GND
S430 EJECT
S420 RDS
S410 POW
S431 T.INFO/MIX(○□) SCAN/MIX(△)
S421 TAPE・PLAY /PAUSE
○□S411 AUDIO ON
S432 M.S.・CD DN/REW
○□S422 AUDIO UP
S412 TUNER BAND /PTY (○□) TUNER BAND (△)
△S418 AUDIO DN
S433 TUNE・A.MEMO /REPEAT
S423 MODE/LOUD
△S428 AUDIO UP
S414 1/DOLBY B.C(△) 1/DOLBY B(□) 1(○)
S434 MS.CD UP/FF
△R435 T.INFO
S425 DISC・PLAY/PAUSE
S415 2/P.S ON(□△) 2(○)
△S436 PTY
S426 4/B.SKIP(□△) 4(○)
S416 3/P.S UP(□△) 3(○)
S427 5
S417 6/PROG
△R482 75-1/4
△LD403 SML-010LT
BPF
REGULATOR
GAIN CONTROL
NOISE AGC
DETECTION
fo ADJUSTMENT REGISTER
IC402 PRM-638CBL
RECEIVER OF REMOCON
R406 1K
R467 2.2K
Q451 2SD1328
LD401 SML-010DT2
R472 390-1/4
R468 2.2K
PL451 9V-85mA
R451 20-1/4
Q452 2SD1328
PL452 9V-85mA
R452 8.2-1/4
LD402 SML-010PT
R473 390-1/4
R463 2.2K
Q453 2SD1328
6V-80mA×13
R464 2.2K
Q454 2SD1328
R465 2.2K
Q455 2SD1328
R466 2.2K
Q456 2SD1328
J(○□)
Q451~456 LAMP DRIVER
R469 R453 R454 R455 R485
22-1/4×5
R408 5.6K
IC401 LC75850W
LCD DRIVER
COMMON DRIVER
ADDRESS DETECTOR
CLOCK GENERATOR
SHIFT REGISTER
LATCH & DRIVER
LCD401 LCD Display
D401 DA204K
D402 DA204K
D403 DA204K
D404 DA204K
C402 0.047
E401 22/6.3
R483 100K
R445 120K
C401 470P
TDM-7532R(□),TDM-7535R(△) Model Only
GR Audio P.C.Board
GR Control P.C.Board
PLAYBACK HEAD HD1101
L-CH
R-CH
TAPE EQ AMP
IC1201 TA7705P
BIAS CIRCUIT
AMP
F/R SW
EQ SW
E1202 100/6.3
R1202 130
R1204 330K
E1205 4.7/25
C1208 0.012
R1208 12K
R1215 22K
R1210 15K
R1201 100
D1201 MA165TA
E1204 100/16
R1213 3.3K
R1212 3.3K
R1211 15K
R1214 22K
C1209 0.012
R1209 12K
E1206 4.7/25
E1201 10/16
E1203 100/6.3
R1203 130
R1205 330K
C1204 220P
C1202 220P
C1203 220P
C1205 220P
(FOR/REV)
(METAL)
(L OUT)
(R OUT)
(ACC)
MUSIC SENSOR
IC1502 M51143AL
LIMITER AMP
SWITCH CIRCUIT
COMP(1)
FF2
VREG
COMP (2)
POWER ON RESET MUSIC SELECT START SENSOR SWITCH
GND
Vcc
R1506 91K
C1505 15P
C1503 0.1
C1502 0.1
R1505 470K
E1501 1/50
R1502 10K
R1501 10K
C1504 0.1
MUSIC SENSOR SWITCHING
Q1502 DTC144TU
R1503 220K
R1504 1M
MOTOR SPEED/FOR/REV CONTROL & SOLENOID DRIVER
IC1501 AN6275NK
LOGIC
Q1501 2SB1243
To Main P.C.Board (CB501)
CB1501
M.S.DET
D.FAST
S.GND
L-CH
R-CH
METAL
F/R
ACC
PACK IN SW
D.MOTOR
MOTOR CONT
EJECT SOL
RF SOL
P.GND
BATT
+5V
PLAY SOL
RUN DET
PACK DOWN
(+5V)
(RUN DET.)
(PACK DN)
(METAL)
(PACK IN)
(BATT)
Photo P.C.Board
PT1501 ON2170-R
S1502
S1503
PACK DOWN SW
METAL SW
TDM-7531R(○) Model Only
CB1701
IC1201 TA7705F
E1203 47/6.3
R1203 130
R1205 330K
C1205 0.012
R1207 11K
E1205 4.7/25
R1209 15K
R1201 100
D1201 MA165TA
E1201 100/16
R1202 3.3K
R1211 3.3K
C1201 470P
C1203 470P
C1202 470P
C1204 470P
R1210 15K
C1206 0.012
R1208 11K
E1206 4.7/25
E1202 10/16
E1204 47/6.3
R1204 130
R1206 330K
S1501 PACK IN SW
IC1701 AN6275NK
Q1701 2SB1243

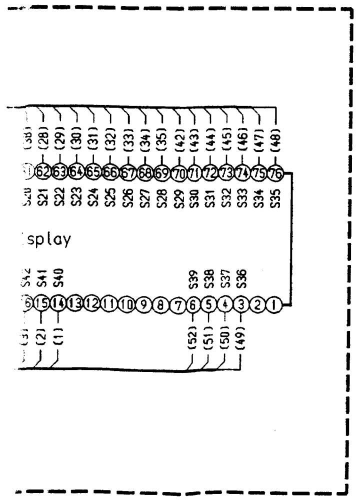

IC1201(□△)
IC1502
IC1201(○)
IC1501
IC1701
Q1502
PT1501
Q1501
Q1701

TDM-7532R(□),TDM-7535R(△) Model Only


GR Audio P.C.Board
GR Control P.C.Board
To Main P.C.Board (CB501)
Photo P.C.Board
PT1501 ON2170-R
S1502 S1503
SD1503
PACK DOWN SW
METAL SW
RF SOL
PLAYBACK HEAD HD1101
L-CH
R-CH
TAPE EQ AMP
IC1201 TA7705P
BIAS CIRCUIT
F/R SW
EQ SW
AMP
MUSIC SENSOR
IC1502 M51143AL
LIMITER AMP
SWITCH CIRCUIT
POWER ON RESET MUSIC SELECT START SENSOR SWITCH
COMP(1) FF2
VREG
COMP (2)
FF1
MUSIC SENSOR SWITCHING
Q1502 DTC144TU
IC1501 AN6275NK
LOGIC
MOTOR SPEED/FOR/REV CONTROL & SOLENOID DRIVER
Q1501 2SB1243
MOTOR FOR/REV SWITCHING
M1501 13.2V-105mA MOTOR
S1501 PACK IN SW
SD1502 PLAY SOL.
SD1501 EJECT SOL.
CB1501
CB1502
CB1503
(FOR/REV)
(METAL)
(L OUT)
(R OUT)
(ACC)
(+5V)
(RUN DET.)
(PACK DN)
(METAL)
(PACK IN)
(BATT)
M.S.DET
O.FAST
S.GND
L-CH
R-CH
METAL
F/R
ACC
PACK IN SW
O.MOTOR
MOTOR CONT
EJECT SOL
RF SOL
P.GND
BATT
+5V
PLAY SOL
RUN DET
PACK DOWN
E1202 100/6.3
R1202 130
R1204 330K
E1205 4.7/25
C1208 0.012
R1208 12K
R1215 22K
R1210 15K
R1201 100
D1201 MA165TA
E1204 100/16
R1213 3.3K
R1212 3.3K
C1204 220P
C1202 220P
C1203 220P
C1205 220P
C1209 0.012
R1211 15K
R1209 12K
R1214 22K
E1206 4.7/25
E1201 10/16
E1203 100/6.3
R1203 130
R1205 330K
R1502 10K
R1501 10K
C1504 0.1
C1505 15P
C1503 0.1
C1502 0.1
R1505 470K
E1501 1/50
R1506 91K
R1503 220K
R1504 1M

TDM-7531R(○) Model Only


GR Control P.C.Board
To Main P.C.Board (CB501)
Photo P.C.Board
PT1501 ON2170-R
S1502 S1503
SD1503
PACK DOWN SW
METAL SW
RF SOL
PLAYBACK HEAD HD1101
L-CH
R-CH
TAPE EQ AMP
IC1201 TA7705F
BIAS CIRCUIT
F/R SW
EQ SW
AMP
IC1701 AN6275NK
LOGIC
MOTOR SPEED/FOR/REV CONTROL & SOLENOID DRIVER
Q1701 2SB1243
MOTOR FOR/REV SWITCHING
M1501 13.2V-105mA MOTOR
S1501 PACK IN SW
SD1502 PLAY SOL.
SD1501 EJECT SOL.
CB1701
CB1702
CB1703
(+5V)
(RUN DET.)
(PACK DN)
(METAL)
(PACK IN)
(BATT)
M.S.DET
O.FAST
S.GND
L.OUT
R.OUT
METAL
F/R
ACC
PACK IN SW
O.MOTOR
MOTOR CONT
EJECT SOL
RF SOL
P.GND
BATT
+5V
PLAY SOL
RUN DET
PACK DOWN
E1203 47/6.3
R1203 130
R1205 330K
C1205 0.012
R1207 11K
E1205 4.7/25
R1209 15K
R1201 100
D1201 MA165TA
E1201 100/16
R1202 3.3K
R1211 3.3K
C1201 470P
C1203 470P
C1202 470P
C1204 470P
R1210 15K
C1206 0.012
R1208 11K
E1206 4.7/25
E1202 10/16
E1204 47/6.3
R1204 130
R1206 330K



IC401

		MODE
1~55	PS	
56	5.5V	
57	0V~5V	IMH
58	—	
59	—	
60	0V	
61	PS	OSC
62	0V~5V	CE
63	0V~5V	CLK
64	0V~5V	DATA

IC402

1	0V~5V
2	0V
3	5V

□△IC1201

1	13.1V	9	2.9V
2	3.1V	10	—
3	4.9V	11	2.9V
4	3.1V	12	2.9V
5	2.9V	13	2.9V
6	2.9V	14	3.1V
7	2.9V	15	0.1V
8	0V	16	3.1V

○IC1201

1	10.8V	9	2.9V
2	3V	10	—
3	5.1V	11	2.9V
4	3V	12	2.9V
5	2.9V	13	2.9V
6	2.9V	14	3V
7	2.9V	15	0V
8	0V	16	3V

□△IC1501

1	0V	10	13.9V
2	0V	11	8.1V
3	5.1V	12	0V
4	—	13	14V
5	5.1V	14	14V
6	—	15	0.2V
7	13.9V	16	14V
8	8.2V	17	13.2V
9	—	18	5.1V

□△IC1502

1	1.41V
2	1.38V
3	0V
4	1.31V
5	0.02V
6	0.02V
7	0.05V
8	14.01V

○IC1701

1	0V	10	11.9V
2	0V	11	5.7V
3	5.1V	12	0V
4	—	13	12V
5	5.1V	14	12V
6	—	15	0.2V
7	11.9V	16	12V
8	5.7V	17	11.3V
9	—	18	5.1V

	B	C	E	MODE
△Q451	0V/4.3V	9.2V/0V	0V/0V	GRN/ORG
△Q452	9.1V/0V	0V/9.2V	0V/0V	GRN/ORG
△Q453	0V/4.3V	13.8V/0V	0V/0V	GRN/ORG
△Q454	13.7V/0V	0V/13.8V	0V/0V	GRN/ORG
△Q455	0V/4.3V	13.8V/0V	0V/0V	GRN/ORG
△Q456	13.7V/0V	0V/13.8V	0V/0V	GRN/ORG
□△Q1501	13.6V	13.8V	14V	
□△Q1502	3.8V	0.4V	0V	
○Q1701	11.3V	11.9V	12V	

[Measuring Conditions]

- Power Supply Voltage : DC14.4V
- Measuring Meter : Digital Multi Meter
- Measuring Point Reference : Between Ground
- Measuring Conditions : FM : 98.1MHz, 1W Output
  MW : 999kHz, 0.16W Output
  LW : 216kHz, 0.16W Output
  TAPE : MTT-212, 1W Output

Note : ○ : For TDM-7531R Model Only,
□ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only,
Others :Common.

NOTES:

1. All resistance values are in ohms. K = 1,000
2. All capacitance values are in microfarads. $P = \frac{1}{1,000,000}$

Electrical Parts List

Resistor : Carbon resistors under 1 / 4 watts are not mentioned in the parts list, please confirm them by schematic diagram.
Capacitor : µF = microfarads, pF = picofarads

Abbreviations

RES. =	Resistor	CAP. =	Capacitor
C.F. =	Carbon Film	ELY. =	Electrolytic
M.F. =	Metal Film	CER. =	Ceramic
M.O. =	Metal Oxide Film	MYL. =	Mylar
M.P. =	Metal Plate	TAN. =	Tantalum
TR. =	Transistor	POLY. =	Polystyrol
TRANS. =	Transformer	PP. =	Polypropylene
CP. =	Chip	PLT. =	Polyethylene
		PF. =	Polyester Film

Main P. C. Board

IC's

Symbol No.		Part No.	Description
	IC001	51T40941U03	MC14066BFL1
	IC002	51T93336F01	NJM4558M
	IC003	51T35504W02	LC7219
	IC004	51T55054W02	SAA6579T
	IC005	51T93336F01	NJM4558M
	IC006	51T67915F01	M51143AL
□	IC201	51T16466W02	CXA1163M
△	IC202	51T65314W01	CXA1562M
	IC203	51T65131W01	TEA6320T
	IC204	51T92001F21	XRA4560F
	IC205	51T92001F21	XRA4560F
	IC206	51T92001F21	XRA4560F
○	IC210	51T35133W02	TA8215H
○	or	51T65310W01	MC13309T3
□	IC210	51T35133W02	TA8215H
□	or	51T65310W01	MC13309T3
△	IC210	51T25614W11	TA8221AH
○	IC211	51T35133W02	TA8215H
○	or	51T65310W01	MC13309T3
□	IC211	51T35133W02	TA8215H
□	or	51T65310W01	MC13309T3
△	IC211	51T25614W11	TA8221AH
	IC501	51T45609W26	45609W26
	IC504	51T75099W04	75099W04
	IC506	51T95014F13	S-8052HNM-CR
	IC801	51T95014F09	S-8054ALR-LN

Transistors

Symbol No.		Part No.	Description
	Q001	48T73888F08	CP., FMG1
	Q002	48T62967F03	CP., DTC124K
	Q003	48T73888F08	CP., FMG1
	Q004	48T73888F08	CP., FMG1
	Q005	48T62967F03	CP., DTC124K
	Q006	48T73888F08	CP., FMG1
	Q007	48T63420F01	CP., 2SA1037K
	Q008	48T62967F03	CP., DTC124K
	Q009	48T63417F01	CP., 2SC2412K
	Q010	48T63420F01	CP., 2SA1037K
△	Q201	48T94471F03	CP., IMH1
△	Q202	48T62967F33	CP., DTC343T
△	Q203	48T62967F33	CP., DTC343T
	Q204	48T62967F33	CP., DTC343T
	Q205	48T62967F33	CP., DTC343T
	Q206	48T62967F33	CP., DTC343T
	Q207	48T62967F33	CP., DTC343T
	Q208	48T62967F33	CP., DTC343T
	Q209	48T62967F33	CP., DTC343T
	Q501	48T73888F12	CP., FMC2
	Q502	48T73888F12	CP., FMC2
△	Q505	48T73888F12	CP., FMC2
	Q506	48T62967F03	CP., DTC124K
	Q507	48T62966F03	CP., DTA124
	Q508	48T62967F03	CP., DTC124K
	Q511	48T63420F01	CP., 2SA1037K
	Q512	48T62967F03	CP., DTC124K
	Q801	48T93828F04	2SD1994A
	Q802	48T73888F12	CP., FMC2
	Q803	48T73888F12	CP., FMC2
	Q804	48T63420F01	CP., 2SA1037K
	Q805	48T62967F03	CP., DTC124K
	Q806	48T84366F01	2SB1243
	Q807	48T62967F02	CP., DTC114K
	Q808	48T15289W03	2SD2008
	Q809	48T62967F05	CP., DTC143XK
	Q810	48T84366F01	2SB1243
	Q811	48T93828F04	2SD1994A
	Q812	48T84234F03	2SB1238
	Q813	48T84234F03	2SB1238
	Q814	48T62967F03	CP., DTC124K
	Q815	48T15289W03	2SD2008
	Q816	48T93828F04	2SD1994A

Diodes / Surge Protector

Symbol No.		Part No.	Description
	D001	48T52446F01	CP., MA151WK
	D002	48T52446F01	CP., MA151WK
	D003	48T68828F11	1SS133
	D201	48T84052F11	11ES2
○	D202	48T84052F11	11ES2
□	D202	48T84052F11	11ES2
△	D202	48T55247W02	11EQS04
○	D203	48T84052F11	11ES2
□	D203	48T84052F11	11ES2
△	D203	48T55247W02	11EQS04
	D204	48T84052F11	11ES2
	D205	48T84052F11	11ES2
○	D206	48T84052F11	11ES2
□	D206	48T84052F11	11ES2
△	D206	48T55247W02	11EQS04
○	D207	48T84052F11	11ES2
□	D207	48T84052F11	11ES2
△	D207	48T55247W02	11EQS04
	D208	48T84052F11	11ES2
	D501	48T68828F11	1SS133
	D502	48T68828F11	1SS133
	D503	48T68828F11	1SS133
	D504	48T63462F01	CP., DAN202K
	D505	48T63462F01	CP., DAN202K
	D507	48T68828F11	1SS133
	D801	48T70933F11	1SS136
	D804	48T84052F11	11ES2
	D805	48T64134F01	CP., DA204K
	D806	48T68828F11	1SS133
	D807	48T68580F03	DSA3A4
△	ZD503	48T45012W29	Zener, MTZJ6.2A
	ZD801	48T25766W13	Zener, HZS7B1L
	ZD802	48T25766W26	Zener, HZS9C3L
	ZD803	48T25766W26	Zener, HZS9C3L
	ZD804	48T25766W24	Zener, HZS9C1L
	ZD805	48T25766W01	Zener, HZS6A1L
	ZD806	48T25766W09	Zener, HZS6C3L
	DSP001	48T81909F01	DSP-201M

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Crystals

Symbol No.		Part No.	Description
	X001	91T45118W43	7.2MHz
	X002	91T45118W18	4.332MHz
	X501	91T45118W17	4.194304MHz
	X502	91T45118W27	4.9152MHz

Filter / Coils

Symbol No.		Part No.	Description
	BPF001	91T75257W01	Filter, LPF11830K
	L001	24T25798W13	Inductor, 1mH
	L801	24T75055W03	Choke

Switch

Symbol No.		Part No.	Description
	S501	40T16096W03	Tact, SKHHLW (RESET)

Capacitors

Symbol No.		Part No.	Description	
	C001	08S65128F69	CP.,	0.01µF
	E001	23S75372W13	ELY.,	0.47µF / 50
○	C002	08T15399W01	CP.,	0.022µF
□	C002	08T15399W03	CP.,	0.047µF
△	C002	08T15399W03	CP.,	0.047µF
	E002	23S75372W14	ELY.,	0.68µF / 50
○	C003	08T15399W03	CP.,	0.047µF
□	C003	08T15399W01	CP.,	0.022µF
△	C003	08T15399W01	CP.,	0.022µF
	C004	08T15399W01	CP.,	0.022µF
	E004	23S75372W04	ELY.,	10µF / 16V
	C005	08T15399W01	CP.,	0.022µF
	E005	23S75372W02	ELY.,	100µF / 10V
	C006	08T15399W01	CP.,	0.022µF
	E006	23S75372W14	ELY.,	0.68µF / 50
	C007	08S65128F69	CP.,	0.01µF
	E007	23S75372W05	ELY.,	22µF / 16V
	C008	08T35122W13	PF.,	0.1µF
	E008	23S75372W04	ELY.,	10µF / 16V
	C009	08S65128F69	CP.,	0.01µF
	E009	23S75372W10	ELY.,	0.1µF / 50V
	C010	08T15399W02	CP.,	0.033µF
	C011	08T35122W15	PF.,	0.15µF
	E011	23S75372W05	ELY.,	22µF / 16V
	C012	08T15399W02	CP.,	0.033µF
	E012	23S75372W16	ELY.,	2.2µF / 50V
	C013	08S65128F69	CP.,	0.01µF
	E013	23S75372W04	ELY.,	10µF / 16V
	C014	08S65128F69	CP.,	0.01µF
	E014	23S75372W04	ELY.,	10µF / 16V
	C015	08S82122F31	CP.,	56pF
	E015	23S75372W10	ELY.,	0.1µF / 50V
	C016	08T15399W01	CP.,	0.022µF
	E016	23S75372W10	ELY.,	0.1µF / 50V
	C017	08S82122F23	CP.,	27pF
	E017	23S75372W06	ELY.,	33µF / 16V
	C018	08S82122F23	CP.,	27pF
	E018	23S75372W10	ELY.,	0.1µF / 50V
	C019	08S82122F23	CP.,	27pF
	E019	23S75372W15	ELY.,	1µF / 50V
	C020	08S82122F23	CP.,	27pF
	E020	23S75372W04	ELY.,	10µF / 16V
	C021	08S65128F47	CP.,	330pF
	C022	08S65128F53	CP.,	560pF
	C023	08S65128F69	CP.,	0.01µF
	C024	08S65128F56	CP.,	820pF
	C025	08T15399W01	CP.,	0.022µF
	C026	08S65128F69	CP.,	0.01µF
	C027	08S65128F69	CP.,	0.01µF
	C028	08S65128F81	CP.,	0.039µF

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.		Part No.	Description	
	C029	08S65128F61	CP.,	2200pF
	C031	08S65128F31	CP.,	68pF
	C032	08T15807W05	CP.,	0.1μF
	C035	23T82372F19	ELY., (B.P)	2.2μF / 50V
	C040	08S65128F35	CP.,	100pF
	C042	08S65128F35	CP.,	100pF
	C043	08S65128F35	CP.,	100pF
△	C201	08T35122W11	CP.,	0.068μF
□	E201	23S75372W15	ELY.,	1μF / 50V
△	E201	23S75372W15	ELY.,	1μF / 50V
△	C202	08T35122W11	CP.,	0.068μF
□	E202	23S75372W15	ELY.,	1μF / 50V
△	E202	23S75372W15	ELY.,	1μF / 50V
	C203	08T35122W07	PF.,	0.033μF
□	E203	23S75372W02	ELY.,	100μF / 10V
△	E203	23S75372W03	ELY.,	220μF / 10V
	C204	08T35122W07	PF.,	0.033μF
□	E204	23S75372W14	ELY.,	0.68μF / 50V
△	E204	23S75372W10	ELY.,	0.1μF / 50V
	C205	08T55390W14	PF.,	5600pF
□	E205	23S75372W14	ELY.,	0.68μF / 50V
△	E205	23S75372W10	ELY.,	0.1μF / 50V
	C206	08T55390W14	PF.,	5600pF
□	E206	23S75372W15	ELY.,	1μF / 50V
△	E206	23S75372W15	ELY.,	1μF / 50V
□	E207	23S75372W05	ELY.,	22μF / 16V
△	E207	23S75372W04	ELY.,	10μF / 16V
	E208	23S75372W15	ELY.,	1μF / 50V
	E209	23S75372W09	ELY.,	4.7μF / 35V
	E210	23S75372W09	ELY.,	4.7μF / 35V
	E211	23S75372W09	ELY.,	4.7μF / 35V
	E212	23S75372W09	ELY.,	4.7μF / 35V
	C213	08T65020W07	CP.,	0.15μF
	E213	23S75372W15	ELY.,	1μF / 50V
	C214	08T65020W07	CP.,	0.15μF
	E214	23S75372W15	ELY.,	1μF / 50V
	C215	08T65020W07	CP.,	0.15μF
	E215	23S75372W02	ELY.,	100μF / 10V
	C216	08T65020W07	CP.,	0.15μF
	C217	08T65020W07	CP.,	0.15μF
	E217	23S75372W15	ELY.,	1μF / 50V
	C218	08T65020W07	CP.,	0.15μF
	E218	23S75372W15	ELY.,	1μF / 50V
	C219	08T65020W07	CP.,	0.15μF
	E219	23S75372W15	ELY.,	1μF / 50V
	C220	08T65020W07	CP.,	0.15μF
	E220	23S75372W07	ELY.,	47μF / 16V
	E221	23S75372W15	ELY.,	1μF / 50V
	E222	23S75372W09	ELY.,	4.7μF / 35V
	E223	23S75372W02	ELY.,	100μF / 10V
△	E224	23S75372W04	ELY.,	10μF / 16V

Symbol No.		Part No.	Description	
△	E225	23S75372W04	ELY.,	10μF / 16V
	E226	23S75372W04	ELY.,	10μF / 16V
	E227	23S75372W04	ELY.,	10μF / 16V
	E228	23S75372W04	ELY.,	10μF / 16V
	E229	23S75372W04	ELY.,	10μF / 16V
	E230	23S75372W04	ELY.,	10μF / 16V
	E231	23S75372W15	ELY.,	1μF / 50V
	E232	23S75372W04	ELY.,	10μF / 16V
	E233	23S75372W04	ELY.,	10μF / 16V
	E234	23S75372W04	ELY.,	10μF / 16V
	E235	23S75372W04	ELY.,	10μF / 16V
	E236	23T55405W15	ELY.,	1μF / 50V
	E237	23T55405W15	ELY.,	1μF / 50V
	E238	23T55405W15	ELY.,	1μF / 50V
	E239	23T55405W15	ELY.,	1μF / 50V
	E240	23S75372W04	ELY.,	10μF / 16V
	E241	23S75372W04	ELY.,	10μF / 16V
	E242	23S75372W04	ELY.,	10μF / 16V
	E243	23S75372W04	ELY.,	10μF / 16V
	E244	23T55378W01	ELY.,	220μF / 10V
	E245	23T55378W01	ELY.,	220μF / 10V
	C501	08S65128F69	CP.,	0.01μF
	E501	23S75372W02	ELY.,	100μF / 10V
	C502	08T15399W01	CP.,	0.022μF
	E502	23S75372W02	ELY.,	100μF / 10V
	C503	08S82122F15	CP.,	12pF
	E503	23S75372W04	ELY.,	10μF / 16V
	C504	08S82122F15	CP.,	12pF
	E504	23S75372W02	ELY.,	100μF / 10V
	E506	23S75372W12	ELY.,	0.33μF / 50
	E510	23S75372W02	ELY.,	100μF / 10V
	C514	08T15399W01	CP.,	0.022μF
	C515	08S82122F23	CP.,	27pF
	C516	08S82122F23	CP.,	27pF
	C519	08S65128F35	CP.,	100pF
△	C523	08S65128F69	CP.,	0.01μF
	C524	08S65128F47	CP.,	330pF
	E801	23S75372W10	ELY.,	0.1μF / 50V
	E802	23S75372W04	ELY.,	10μF / 16V
	E803	23S75372W04	ELY.,	10μF / 16V
	C804	08S65128F69	CP.,	0.01μF
	E804	23T00149L26	ELY.,	220μF / 16V
	C805	08T15399W01	CP.,	0.022μF
	E805	23T55378W01	ELY.,	220μF / 10V
	C806	08T15399W01	CP.,	0.022μF
	E806	23S75372W04	ELY.,	10μF / 16V
	C807	08S53332F67	CP.,	0.1μF
	C808	08S53332F67	CP.,	0.1μF
	E810	23T00149L27	ELY.,	330μF / 16V
	E811	23T35505W12	ELY.,	2200μF / 16V
	E812	23T35505W12	ELY.,	2200μF / 16V
	E813	23S75372W15	ELY.,	1μF / 50V

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.		Part No.	Description
Resistors (All resistors are chip 1/10W±5% unless otherwise noted.)			
	R001	06S64995F77	10K ohm
	R002	06S64995F77	10K ohm
	R003	06S64995F77	10K ohm
	R004	06S64995F77	10K ohm
	R006	06S64995F81	15K ohm
	R007	06S64995F61	2.2K ohm
	R008	06S64995F61	2.2K ohm
	R009	06S64995F53	1K ohm
	R012	06S64995F53	1K ohm
	R013	06S64995F53	1K ohm
	R014	06S64995F61	2.2K ohm
	R015	06S64995F61	2.2K ohm
	R016	06S64995F29	100 ohm
	R017	06S64995F53	1K ohm
	R018	06S64995F83	18K ohm
	R019	06S64995F85	22K ohm
	R020	06S64995F71	5.6K ohm
	R021	06S64995F53	1K ohm
	R022	06S64995F77	10K ohm
	R023	06S64995F61	2.2K ohm
	R024	06S64995F53	1K ohm
	R025	06S64995F93	47K ohm
	R026	06S64995F53	1K ohm
	R027	06S64995F93	47K ohm
	R028	06S64995F61	2.2K ohm
	R030	06S64995F77	10K ohm
	R031	06S64995F77	10K ohm
	R032	06S64996F02	100K ohm
	R033	06S64995F81	15K ohm
	R034	06S64996F09	200K ohm
	R035	06S64996F14	330K ohm
	R036	06S64995F29	100 ohm
	R037	06S64995F79	12K ohm
	R038	06S64996F04	120K ohm
	R039	06S64995F13	22 ohm
	R040	06S64996F02	100K ohm
	R041	06S64996F02	100K ohm
	R042	06S64995F89	33K ohm
	R043	06S64995F89	33K ohm
	R044	06S64996F26	1M ohm
	R045	06S64996F01	91K ohm
○	R051	06S64995F85	22K ohm
○	R052	06S64995F85	22K ohm
○	R053	06S64995F92	43K ohm
○	R054	06S64995F92	43K ohm
	R055	06S64995F69	4.7K ohm
	R060	06S64995F53	1K ohm
	R061	06S64995F53	1K ohm
	R062	06S64995F53	1K ohm

Symbol No.		Part No.	Description
	R070	06S64995F53	1K ohm
□	R203	06S64996F30	2.2M ohm
△	R203	06S64996F30	2.2M ohm
□	R204	06S64996F30	2.2M ohm
△	R204	06S64996F30	2.2M ohm
□	R205	06S64995F61	2.2K ohm
△	R205	06S64995F60	2K ohm
□	R206	06S64995F61	2.2K ohm
△	R206	06S64995F60	2K ohm
□	R207	06S64995F53	1K ohm
△	R207	06S64995F61	2.2K ohm
□	R208	06S64995F53	1K ohm
△	R208	06S64995F61	2.2K ohm
□	R209	06S64995F85	22K ohm
□	R210	06S64995F92	43K ohm
△	R210	06S64995F84	20K ohm
□	R211	06S64995F69	4.7K ohm
△	R212	06S64995F37	220 ohm
△	R213	06S64995F79	12K ohm
△	R214	06S64995F75	8.2K ohm
○	R221	06S64995F79	12K ohm
□	R221	06S64995F77	10K ohm
△	R221	06S64995F77	10K ohm
○	R222	06S64995F79	12K ohm
□	R222	06S64995F77	10K ohm
△	R222	06S64995F77	10K ohm
○	R223	06S64995F87	27K ohm
□	R223	06S64995F77	10K ohm
△	R223	06S64995F77	10K ohm
○	R224	06S64995F87	27K ohm
□	R224	06S64995F77	10K ohm
△	R224	06S64995F77	10K ohm
△	R225	06S64995F37	220 ohm
△	R226	06S64995F37	220 ohm
	R227	06S64995F37	220 ohm
	R228	06S64995F37	220 ohm
△	R229	06S64995F85	22K ohm
△	R230	06S64995F85	22K ohm
	R231	06S64995F85	22K ohm
	R232	06S64995F85	22K ohm
△	R233	06S64995F37	220 ohm
△	R234	06S64995F37	220 ohm
	R235	06S64995F37	220 ohm
	R236	06S64995F37	220 ohm
	R237	06S64995F85	22K ohm
	R238	06S64995F85	22K ohm
	R239	06S64995F85	22K ohm
	R240	06S64995F85	22K ohm
○	R241	06S64995F69	4.7K ohm
□	R241	06S64995F77	10K ohm
△	R241	06S64995F77	10K ohm

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.		Part No.	Description
○	R242	06S64995F69	4.7K ohm
□	R242	06S64995F77	10K ohm
△	R242	06S64995F77	10K ohm
○	R243	06S64995F69	4.7K ohm
□	R243	06S64995F77	10K ohm
△	R243	06S64995F77	10K ohm
○	R244	06S64995F69	4.7K ohm
□	R244	06S64995F77	10K ohm
△	R244	06S64995F77	10K ohm
	R245	06S64995F37	220 ohm
	R246	06S64995F37	220 ohm
	R247	06S64995F37	220 ohm
	R248	06S64995F37	220 ohm
	R249	06S64995F67	3.9K ohm
	R250	06S64995F67	3.9K ohm
	R251	06S64995F67	3.9K ohm
	R252	06S64995F67	3.9K ohm
	R253	06S64995F57	1.5K ohm
	R254	06S64995F57	1.5K ohm
	R255	06S64995F57	1.5K ohm
	R256	06S64995F57	1.5K ohm
	R257	06S64995F53	1K ohm
	R258	06S64995F53	1K ohm
	R259	06S64995F53	1K ohm
	R260	06S64995F53	1K ohm
	R261	06S64995F57	1.5K ohm
	R262	06S64995F57	1.5K ohm
	R263	06S64995F57	1.5K ohm
	R264	06S64995F57	1.5K ohm
	R265	06S53331F40	2.2 ohm 1/8W
	R266	06S53331F40	2.2 ohm 1/8W
	R267	06S53331F40	2.2 ohm 1/8W
	R268	06S53331F40	2.2 ohm 1/8W
	R270	06S53331F40	2.2 ohm 1/8W
	R271	06S53331F40	2.2 ohm 1/8W
	R272	06S53331F40	2.2 ohm 1/8W
	R275	06S53331F40	2.2 ohm 1/8W
	R501	06S64995F41	330 ohm
	R502	06S64995F89	33K ohm
	R503	06S64995F93	47K ohm
	R504	06S64995F93	47K ohm
	R505	06S64995F93	47K ohm
	R506	06S64995F69	4.7K ohm
○	R507	06S64995F45	470 ohm
□	R507	06S64995F53	1K ohm
△	R507	06S64995F53	1K ohm
	R508	06S64995F85	22K ohm
	R509	06S64995F93	47K ohm
	R510	06S64995F93	47K ohm
△	R512	06S64995F61	2.2K ohm
□	R513	06S64995F61	2.2K ohm

Symbol No.		Part No.	Description
△	R513	06S64995F61	2.2K ohm
	R514	06S64995F85	22K ohm
	R515	06S64995F53	1K ohm
	R516	06S64995F53	1K ohm
	R517	06S64995F62	2.4K ohm
	R518	06S64996F02	100K ohm
	R519	06S64996F02	100K ohm
	R520	06S64995F85	22K ohm
	R521	06S64995F69	4.7K ohm
	R522	06S64995F61	2.2K ohm
	R523	06S64995F53	1K ohm
	R524	06S64995F53	1K ohm
	R525	06S64996F02	100K ohm
	R526	06S64995F93	47K ohm
	R527	06S64995F93	47K ohm
	R531	06S64995F93	47K ohm
	R532	06S64995F93	47K ohm
	R533	06S64995F93	47K ohm
	R537	06S64995F53	1K ohm
	R540	06S64995F93	47K ohm
	R544	06S64995F93	47K ohm
	R550	06S64995F85	22K ohm
	R551	06S64995F77	10K ohm
	R552	06S70072F77	10K ohm 1/4W
	R553	06S70072F77	10K ohm 1/4W
	R554	06S70072F77	10K ohm 1/4W
	R556	06S70072F75	8.2K ohm 1/4W
	R557	06S70072F75	8.2K ohm 1/4W
	R558	06S70072F75	8.2K ohm 1/4W
	R559	06S64995F77	10K ohm
	R560	06S64995F77	10K ohm
	R561	06S64995F77	10K ohm
	R562	06S64995F77	10K ohm
	R563	06S64995F77	10K ohm
	R564	06S70072F53	1K ohm 1/4W
	R565	06S64996F02	100K ohm
△	R566	06S64995F77	10K ohm
△	R567	06S64995F93	47K ohm
	R568	06S64995F85	22K ohm
	R569	06S64995F85	22K ohm
	R570	06S53330F85	22K ohm 1/8W
	R571	06S70072F37	220 ohm 1/4W
	R573	06S64995F93	47K ohm
	R574	06S64996F02	100K ohm
	R577	06S64995F93	47K ohm
	R579	06S64995F53	1K ohm
	R580	06S64995F53	1K ohm
	R581	06S64995F53	1K ohm
	R582	06S64995F53	1K ohm
	R583	06S64995F53	1K ohm
	R584	06S64995F53	1K ohm

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.		Part No.	Description
	R585	06S64995F53	1K ohm
	R586	06S64995F53	1K ohm
	R587	06S64996F10	220K ohm
	R588	06S64995F53	1K ohm
△	R589	06S70072F26	75 ohm 1/4W
	R590	06S64995F77	10K ohm
	R591	06S64995F61	2.2K ohm
	R593	06S64995F53	1K ohm
	R594	06S64995F53	1K ohm
	R595	06S64995F53	1K ohm
	R596	06S64995F53	1K ohm
○	R801	06S70072F69	4.7K ohm 1/4W
□	R801	06S70072F69	4.7K ohm 1/4W
△	R801	06S70072F66	3.6K ohm 1/4W
	R803	06S53330F69	4.7K ohm 1/8W
	R804	06S53330F77	10K ohm 1/8W
	R805	06S70072F45	470 ohm 1/4W
	R806	06S64995F77	10K ohm
	R807	06S70072F61	2.2K ohm 1/4W
	R808	06S64995F77	10K ohm
	R809	06S70072F03	6.8 ohm 1/4W
	R810	06S70072F03	6.8 ohm 1/4W
	R811	06S70072F03	6.8 ohm 1/4W
	R812	06S64995F77	10K ohm
	R813	06S64995F77	10K ohm
	R814	06S70072F57	1.5K ohm 1/4W
	R815	06S53330F77	10K ohm 1/8W
	R816	06S64996F02	100K ohm
	R817	06S70072F40	300 ohm 1/4W
	R818	06S70072F57	1.5K ohm 1/4W
	R819	06S70072F57	1.5K ohm 1/4W
	R820	06S70072F57	1.5K ohm 1/4W
	R821	06S64995F77	10K ohm
	R822	06S70072F57	1.5K ohm 1/4W
	R824	06S70072F57	1.5K ohm 1/4W
	R825	06S64995F77	10K ohm
	R831	06S64995F65	3.3K ohm
	R832	06S64995F53	1K ohm
	R833	06S70072F61	2.2K ohm 1/4W
	R834	06S64995F77	10K ohm
	R835	06S70072F41	330 ohm 1/4W
	R836	06S53330F73	6.8K ohm 1/8W
□	VR201	18T15356W13	Variable, 10K ohm
△	VR201	18T15356W13	Variable, 10K ohm
□	VR202	18T15356W13	Variable, 10K ohm
△	VR202	18T15356W13	Variable, 10K ohm

Symbol No.		Part No.	Description
Front P. C. Board			
IC's			
	IC401	51T55492W01	LC75850W
	IC402	51T55246W02	RPM-638CBL
Transistors			
△	Q451	48T63788F04	CP., 2SD1328
△	Q452	48T63788F04	CP., 2SD1328
△	Q453	48T63788F04	CP., 2SD1328
△	Q454	48T63788F04	CP., 2SD1328
△	Q455	48T63788F04	CP., 2SD1328
△	Q456	48T63788F04	CP., 2SD1328
Diodes			
	D401	48T64134F01	CP., DA204K
	D402	48T64134F01	CP., DA204K
	D403	48T64134F01	CP., DA204K
	D404	48T64134F01	CP., DA204K
LED's			
△	LD401	48T65477W01	CP., SML-010DT2(ORG)
	LD402	48T65477W03	CP., SML-010PT(GRN)
△	LD403	48T65477W02	CP., SML-010LT(RED)
Switches			
	S410	40T55656W03	CP. Tact, SKQMAJ (POW)
○	S411	40T55656W03	CP. Tact, SKQMAJ (AUDIO DN)
□	S411	40T55656W03	CP. Tact, SKQMAJ (AUDIO DN)
○	S412	40T55656W03	CP. Tact, SKQMAJ (TUNER BAND / PTY)
□	S412	40T55656W03	CP. Tact, SKQMAJ (TUNER BAND / PTY)
△	S412	40T55656W03	CP. Tact, SKQMAJ (TUNER / BAND)
○	S414	40T55656W03	CP. Tact, SKQMAJ (1)
□	S414	40T55656W03	CP. Tact, SKQMAJ (1 / DOLBY B)
△	S414	40T55656W03	CP. Tact, SKQMAJ (1 / DOLBY B·C)
○	S415	40T55656W03	CP. Tact, SKQMAJ (2)
□	S415	40T55656W03	CP. Tact, SKQMAJ (2 / P.S DN)
△	S415	40T55656W03	CP. Tact, SKQMAJ (2 / P.S DN)
○	S416	40T55656W03	CP. Tact, SKQMAJ (3)
□	S416	40T55656W03	CP. Tact, SKQMAJ (3 / P.S UP)
△	S416	40T55656W03	CP. Tact, SKQMAJ (3 / P.S UP)
	S417	40T55656W03	CP. Tact, SKQMAJ (6 / PROG)
△	S418	40T55571W01	CP. Tact, SKQAXX(AUDIO DN)
	S420	40T55656W03	CP. Tact, SKQMAJ (RDS)

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.		Part No.	Description
	S421	40T55656W03	CP. Tact, SKQMAJ (TAPE · PLAY / PAUSE)
○	S422	40T55656W03	CP. Tact, SKQMAJ (AUDIO UP)
□	S422	40T55656W03	CP. Tact, SKQMAJ (AUDIO UP)
	S423	40T55656W03	CP. Tact, SKQMAJ (MODE / LOUD)
	S425	40T55656W03	CP. Tact, SKQMAJ (DISC · PLAY / PAUSE)
○	S426	40T55656W03	CP. Tact, SKQMAJ (4)
□	S426	40T55656W03	CP. Tact, SKQMAJ (4 / B.SKIP)
△	S426	40T55656W03	CP. Tact, SKQMAJ (4 / B.SKIP)
	S427	40T55656W03	CP. Tact, SKQMAJ (5)
△	S428	40T55571W01	CP. Tact, SKQAXX (AUDIO UP)
	S430	40T55656W03	CP. Tact, SKQMAJ (EJECT)
○	S431	40T55656W03	CP. Tact, SKQMAJ (T.INFO / MIX)
□	S431	40T55656W03	CP. Tact, SKQMAJ (T.INFO / MIX)
△	S431	40T55656W03	CP. Tact, SKQMAJ (SCAN / MIX)
	S432	40T55656W03	CP. Tact, SKQMAJ (M.S CD·DN / REW)
	S433	40T55656W03	CP. Tact, SKQMAJ (TUNE·A.MEMO / REPEAT)
	S434	40T55656W03	CP. Tact, SKQMAJ (M.S. CD·UP / FF)
△	S435	40T55656W03	CP. Tact, SKQMAJ (T.INFO)
△	S436	40T55656W03	CP. Tact, SKQMAJ (PTY)
Lamps			
△	PL451	65T75231W02	9V-85mA
	PL452	65T75231W01	9V-85mA
△	PL454	65T75233W01	CP., 6V-80mA
△	PL455	65T75233W01	CP., 6V-80mA
	PL456	65T75233W01	CP., 6V-80mA
	PL457	65T75233W01	CP., 6V-80mA
	PL458	65T75233W01	CP., 6V-80mA
	PL459	65T75233W01	CP., 6V-80mA
△	PL460	65T75233W01	CP., 6V-80mA
△	PL461	65T75233W01	CP., 6V-80mA
△	PL462	65T75233W01	CP., 6V-80mA
△	PL463	65T75233W01	CP., 6V-80mA
	PL464	65T75233W01	CP., 6V-80mA
	PL465	65T75233W01	CP., 6V-80mA
	PL466	65T75233W01	CP., 6V-80mA
Capacitors			
	C401	08S82122F53	CP., 470pF
	E401	23T25191W42	CP., ELY. 22µF / 6.3V
	C402	08T15399W03	CP., 0.047µF

Symbol No.		Part No.	Description
Resistors (All resistors are chip 1/10W±5% unless otherwise noted.)			
	R401	06S64995F79	12K ohm
	R402	06S64995F77	10K ohm
	R403	06S64995F77	10K ohm
	R404	06S64995F77	10K ohm
	R405	06S64995F77	10K ohm
	R406	06S64995F53	1K ohm
	R407	06S64995F79	12K ohm
	R408	06S64995F71	5.6K ohm
	R411	06S64995F55	1.2K ohm
	R412	06S64995F57	1.5K ohm
	R413	06S64995F61	2.2K ohm
	R414	06S64995F65	3.3K ohm
	R415	06S64995F71	5.6K ohm
	R416	06S64995F78	11K ohm
	R417	06S64995F89	33K ohm
	R421	06S64995F55	1.2K ohm
	R422	06S64995F57	1.5K ohm
	R423	06S64995F61	2.2K ohm
	R424	06S64995F65	3.3K ohm
	R425	06S64995F71	5.6K ohm
	R426	06S64995F78	11K ohm
	R427	06S64995F89	33K ohm
	R431	06S64995F55	1.2K ohm
	R432	06S64995F57	1.5K ohm
	R433	06S64995F61	2.2K ohm
	R434	06S64995F65	3.3K ohm
△	R435	06S64995F71	5.6K ohm
△	R436	06S64995F78	11K ohm
	R441	06S64995F53	1K ohm
	R442	06S64995F53	1K ohm
	R443	06S64995F53	1K ohm
	R444	06S64995F53	1K ohm
	R445	06S64996F04	120K ohm
△	R451	06S70072F12	20 ohm 1/4W
	R452	06S70072F04	8.2 ohm 1/4W
	R453	06S70072F13	22 ohm 1/4W
	R454	06S70072F13	22 ohm 1/4W
	R455	06S70072F13	22 ohm 1/4W
△	R456	06S70072F17	33 ohm 1/4W
	R457	06S70072F15	27 ohm 1/4W
	R458	06S70072F13	22 ohm 1/4W
△	R459	06S70072F16	30 ohm 1/4W
△	R460	06S70072F13	22 ohm 1/4W
	R461	06S70072F13	22 ohm 1/4W
△	R463	06S64995F61	2.2K ohm
△	R464	06S64995F61	2.2K ohm
△	R465	06S64995F61	2.2K ohm
△	R466	06S64995F61	2.2K ohm
△	R467	06S64995F61	2.2K ohm

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.	Part No.	Description
△ R468	06S64995F61	2.2K ohm
R469	06S70072F13	22 ohm 1/4W
△ R472	06S70072F43	390 ohm 1/4W
R473	06S70072F43	390 ohm 1/4W
△ R476	06S70072F17	33 ohm 1/4W
R477	06S70072F15	27 ohm 1/4W
R478	06S70072F13	22 ohm 1/4W
△ R479	06S70072F17	33 ohm 1/4W
△ R480	06S70072F13	22 ohm 1/4W
R481	06S70072F13	22 ohm 1/4W
△ R482	06S70072F26	75 ohm 1/4W
R483	06S64996F02	100K ohm
R485	06S70072F13	22 ohm 1/4W

○ GR Control P. C. Board

IC's

Symbol No.	Part No.	Description
IC1201	51T64606F02	TA7705F
IC1701	51T25621W02	AN6275NK

Transistor / Diode

Symbol No.	Part No.	Description
Q1701	48T84366F05	2SB1243
D1201	48T44813F01	Diode, MA165TA

Capacitors

Symbol No.	Part No.	Description
C1201	08S53332F31	CP., 470pF
E1201	23S82482F02	ELY., 100μF / 16V
C1202	08S53332F31	CP., 470pF
E1202	23S61523F12	ELY., 10μF / 16V
or	23T55402W15	ELY., 10μF / 16V
C1203	08S53332F31	CP., 470pF
E1203	23S61523F07	ELY., 47μF / 6.3V
or	23T55402W07	ELY., 47μF / 6.3V
C1204	08S53332F31	CP., 470pF
E1204	23S61523F07	ELY., 47μF / 6.3V
or	23T55402W07	ELY., 47μF / 6.3V
C1205	08S53332F48	CP., 0.012μF
E1205	23S61523F17	ELY., 4.7μF / 25V
or	23T55402W20	ELY., 4.7μF / 25V
C1206	08S53332F48	CP., 0.012μF

Symbol No.	Part No.	Description
E1206	23S61523F17	ELY., 4.7μF / 25V
or	23T55402W20	ELY., 4.7μF / 25V

Resistors (All resistors are chip 1/8W±5% unless otherwise noted.)

Symbol No.	Part No.	Description
R1201	06S53330F29	100 ohm
R1202	06S53330F65	3.3K ohm
R1203	06S53330F32	130 ohm
R1204	06S53330F32	130 ohm
R1205	06S64996F14	330K ohm1/10W
R1206	06S64996F14	330K ohm1/10W
R1207	06S64995F78	11K ohm1/10W
R1208	06S53330F78	11K ohm
R1209	06S53330F81	15K ohm
R1210	06S53330F81	15K ohm
R1211	06S53330F65	3.3K ohm

□△ GR Control P. C. Board

IC's / Transistors

Symbol No.	Part No.	Description
IC1501	51T25621W02	IC, AN6275NK
IC1502	51T67915F01	IC, M51143AL
Q1501	48T84366F05	2SB1243
Q1502	48T94606F12	CP., DTC144TU

Capacitors

Symbol No.	Part No.	Description
E1501	23S61524F32	ELY., 1μF / 50V
or	23T55521W34	ELY., 1μF / 50V
C1502	08T35374W01	CP., 0.1μF
C1503	08T35374W01	CP., 0.1μF
C1504	08T35374W01	CP., 0.1μF
C1505	08S65128F15	CP., 15pF

Resistors (All resistors are chip 1/10W±5% unless otherwise noted.)

Symbol No.	Part No.	Description
R1501	06S64995F77	10K ohm
R1502	06S64995F77	10K ohm
R1503	06S64996F10	220K ohm
R1504	06S64996F26	1M ohm

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Symbol No.	Part No.	Description
R1505	06S64996F18	470K ohm
R1506	06S64996F01	91K ohm

□△ GR Audio P. C. Board

IC / Diode

Symbol No.	Part No.	Description
IC1201	51T15146W01	IC, TA7705P
D1201	48T44813F01	MA165TA

Capacitors

Symbol No.	Part No.	Description
E1201	23S61524F13	ELY., 10μF / 16V
or	23T55521W15	ELY., 10μF / 16V
C1202	08S72783F27	CP., 220pF
E1202	23S61524F08	ELY., 100μF / 6.3V
or	23T55521W07	ELY., 100μF / 6.3V
C1203	08S72783F27	CP., 220pF
E1203	23S61524F08	ELY., 100μF / 6.3V
or	23T55521W07	ELY., 100μF / 6.3V
C1204	08S72783F27	CP., 220pF
E1204	23S82482F02	ELY., 100μF / 16V
or	23T55521W19	ELY., 100μF / 16V
C1205	08S72783F27	CP., 220pF
E1205	23S61524F18	ELY., 4.7μF / 25V
or	23T55521W20	ELY., 4.7μF / 25V
E1206	23S61524F18	ELY., 4.7μF / 25V
or	23T55521W20	ELY., 4.7μF / 25V
C1208	08T35122W02	TF, 0.012μF
C1209	08T35122W02	TF, 0.012μF

Resistors (All resistors are chip 1/10W±5% unless otherwise noted.)

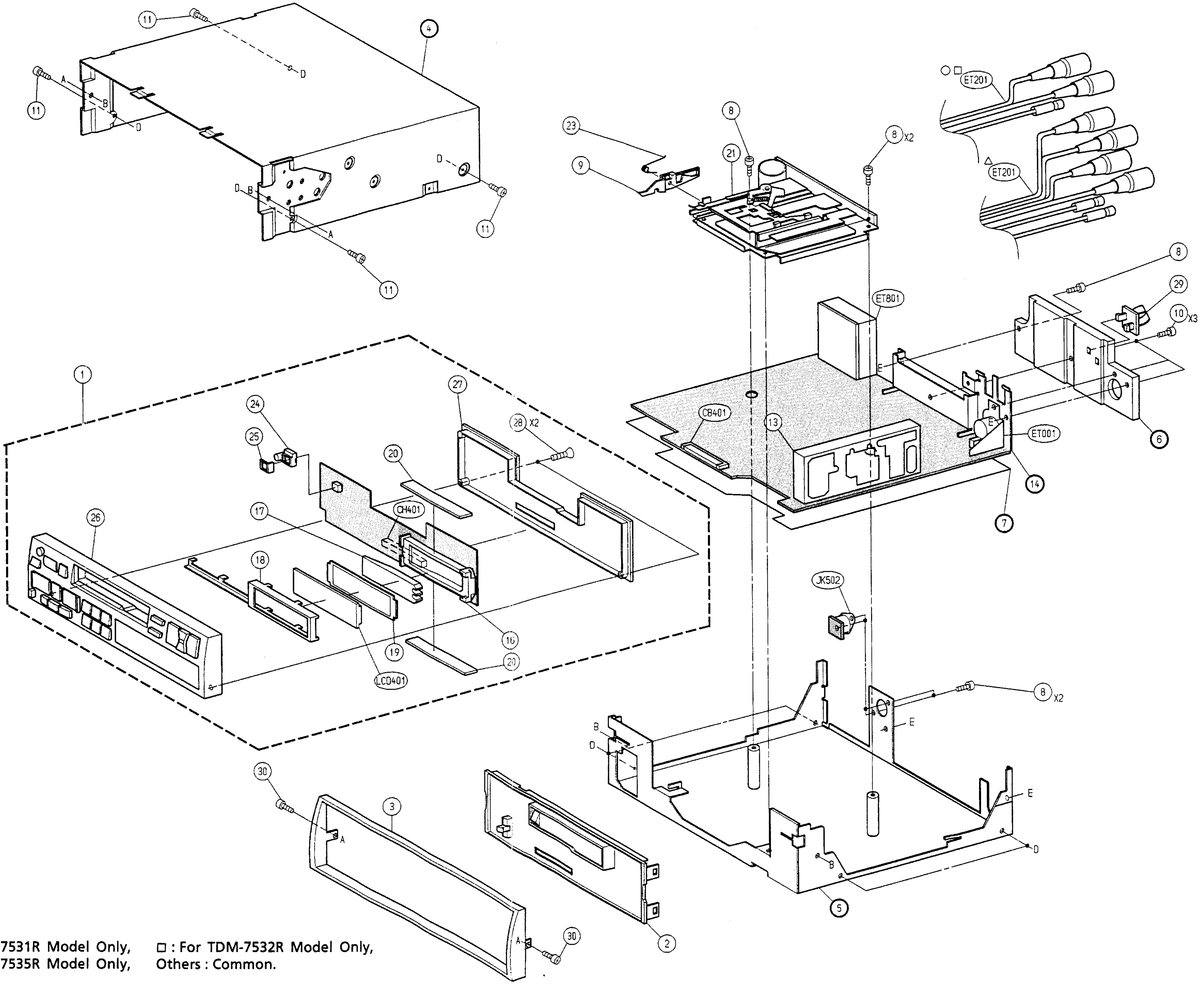
Symbol No.	Part No.	Description
R1201	06S53330F29	100 ohm 1/8W
R1202	06S53330F32	130 ohm 1/8W
R1203	06S53330F32	130 ohm 1/8W
R1204	06S64996F14	330K ohm
R1205	06S64996F14	330K ohm
R1208	06S64995F79	12K ohm
R1209	06S64995F79	12K ohm
R1210	06S64995F81	15K ohm
R1211	06S64995F81	15K ohm
R1212	06S64995F65	3.3K ohm
R1213	06S53330F65	3.3K ohm 1/8W
R1214	06S53330F85	22K ohm 1/8W
R1215	06S64995F85	22K ohm

Miscellaneous

Symbol No.	Part No.	Description
○ CB401	09T75038W14	16Pin Connector
□ CB401	09T75038W14	16Pin Connector
△ CB401	09T75038W16	16Pin Connector
CH401	09T75039W16	16Pin Connector
ET001	09T55211W01	Antenna Receptacle
○ ET201	01T55244W05	Assy., Connectors (Rear Output RCA Connectors / Remote Turn-On Lead)
□ ET201	01T55244W05	Assy., Connectors (Rear Output RCA Connectors / Remote Turn-On Lead)
△ ET201	01T55244W07	Assy., Connectors (Front / Rear Output RCA Connectors / Audio Interrupt In Lead / Remote Turn-On Lead)
ET801	01T75292W01	Assy., ISO Connector (Open / Speaker Output / Power)
○ HD1101	88T10373W02	Head
□ HD1101	88T15971W02	Head
△ HD1101	88T15971W02	Head
○ M1501	01V53200W99	Assy., Main Motor (13.2V-105mA)
□ M1501	01V51800W42	Assy., Main Motor (13.2V-105mA)
△ M1501	01V51800W42	Assy., Main Motor (13.2V-105mA)
JK502	09T16653W01	DIN Connector
LCD401	65T75146W01	LCD Display
PT1501	51T15144W01	Sensor, Photo ON2170-R
S1501	40T15222W01	Switch, Detector (PACK IN)
S1502	40T15382W01	Switch, Detector (PACK DOWN)
S1503	40T15382W01	Switch, Detector (METAL)
SD1501	01T10369W02	Assy., Eject Solenoid
SD1502	01T15249W01	Assy., Play Solenoid
SD1503	01T10371W01	Assy., RF Solenoid

Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Exploded View (Cabinet)



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JK502

Note : ○ : For TDM-7531R Model Only, □ : For TDM-7532R Model Only,
△ : For TDM-7535R Model Only, Others : Common.

Cabinet Assembly Parts List

Note : No parts number on parts list are not supplied.

Symbol No.		Index	Part No.	Description
○	1	3-B	01V71800W61	Assy., Nose Unit
□	1	3-B	01V71800W56	Assy., Nose Unit
△	1	3-B	01V71700W43	Assy., Nose Unit
	2	5-E	13C70374W01	Assy., Front Escutcheon
	3	5-C	33C70276W01	Assy., Face Plate
	8		03S44205G29	Screw, Pan (M2.6×6)
	9	2-D	45C61079W01	Lever, Door
	10	2-G	03S38013W02	Screw, Pan (M2.6×14)
	11		03S38013W24	Screw, Pan (M2.6×6)
	13	3-E	77B60578W01	FM/MW/LW Tuner Unit, MB4R3010 (FE001)
	16	4-D	15B70308W01	Case, LCD
	17	3-C	61A70307W01	Lens, LCD
	18	3-C	15B70852W01	Cover, LCD
	19	4-D	26A70309W01	Reflector, Sheet
	20		75T75143W01	Rubber, Connector
○	21	2-E	81D50232W01	Cassette Deck, GR75H110
□	21	2-E	81D40887W02	Cassette Deck, GR75H120
△	21	2-E	81D40887W02	Cassette Deck, GR75H120
	23	1-D	41A20424W01	Spring, Door
	24	3-C	43A70639W01	Spacer, Remote
	25	3-C	07A71469W01	Bracket, Remote
○	26	3-B	13D70279W09	Assy., Nosepiece
□	26	3-B	13D70279W06	Assy., Nosepiece
△	26	3-B	13D70279W03	Assy., Nosepiece
	27	3-D	13D70291W01	Nose, Bottom
	28	3-D	03S68555F39	Screw, Countersink (M1.7×10)
	29	2-G	15A70387W01	Holder, Antenna
	30		03S38013W13	Screw, Bind (M2.6×6)

Symbol No.	Index	Part No.	Description

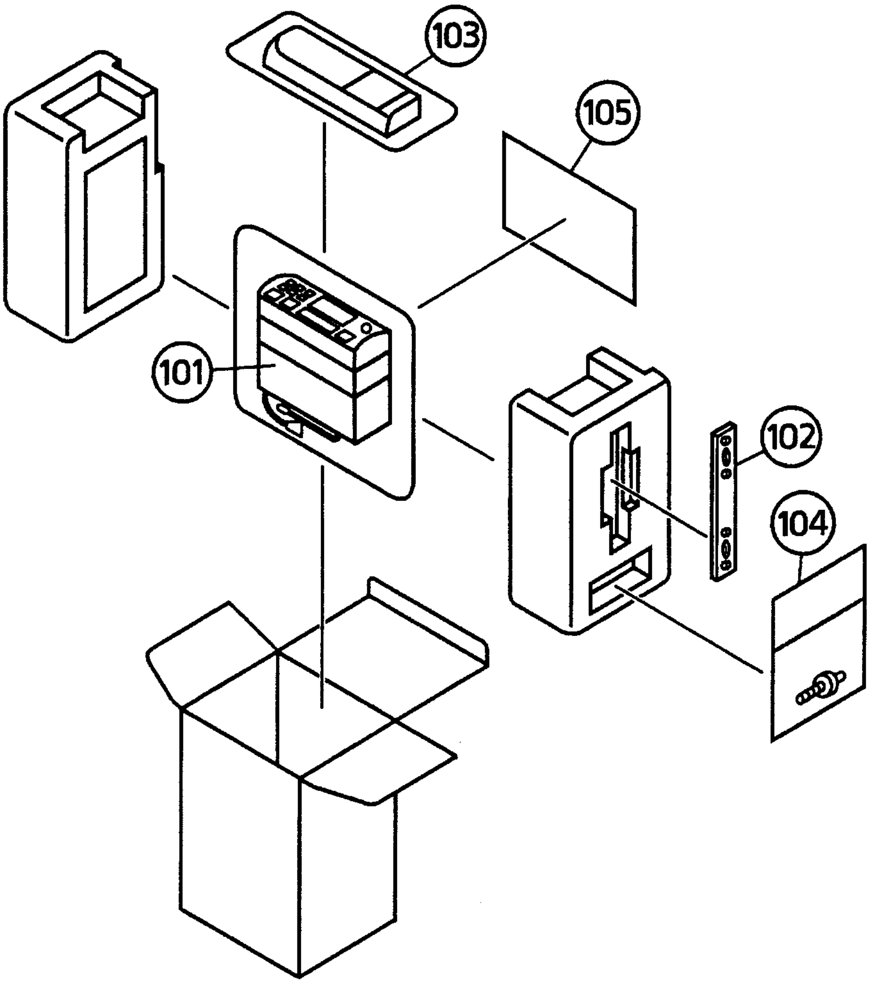
Notes : ○: For TDM-7531R Model only, □: For TDM-7532R Model only,
△: For TDM-7535R Model only, Others : Common.

Packing Assembly Parts List

Symbol No.	Part No.	Description
101	15D50406W01	Case, Inner
102	07B64552F01	Bracket, Strap Receiver
103	15D60773W01	Carring Case
104-1	02B47353F01	Nut, Hex. (M5)
104-2	03S72235F13	Screw, Countersink (M5×8)
104-3	46A42363F01	Stud, Bolt
104-4	36A11113W01	Cap, Rubber (A)
104-5	03A11112W01	Bolt, Hex. (M5)
104-6	01T75363W01	JASO / ISO Antenna Adaptor
105	68P61329W47	Owner's Manual

Symbol No.	Part No.	Description

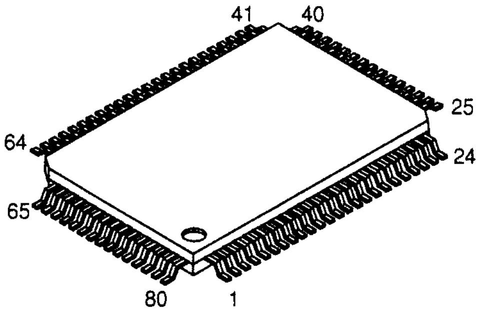
Packing Method View



Semi - Conductor Lead Identifications

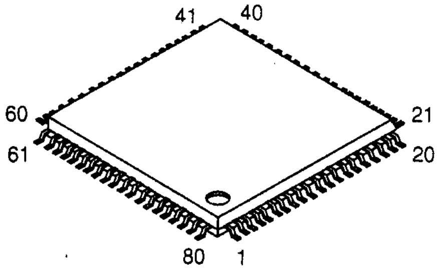
Note : For the parts not mentioned, refer to the Schematic Diagram.

45609W26 : IC501



PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	NOSE ON	I	21	NC	—	41	LED IND	O	61	GND	—
2	AV_{REF}	I	22	PWR IC ON	O	42	LCD CLK	O	62	GND	—
3	V_{DD}	—	23	POWER CONT	O	43	$\overline{\text{GRN}}$/ORG	O	63	GND	—
4	V_{DD}	—	24	A.MUTE	O	44	LCD DATA	O	64	GND	—
5	AV REF OUT	O	25	NC	—	45	$\overline{\text{LCD INH}}$	O	65	GND	—
6	PLAY SOL	O	26	NC	—	46	$\overline{\text{DTS MUTE}}$	I	66	GND	—
7	RF SOL	O	27	NC	—	47	ACC+5	I	67	GND	—
8	EJECT SOL	O	28	IN INT	I	48	CHG D-IN	I	68	GND	—
9	MOTOR CONT	O	29	CHG D-OUT	O	49	REMOCON	I	69	GND	—
10	O.MOTOR	O	30	E.VOL.CLK	O	50	DTS STATUS	I	70	GND	—
11	FOR/$\overline{\text{REV}}$	O	31	E.VOL.DATA	O	51	DTS CMD	O	71	GND	—
12	O.FAST	O	32	NC	—	52	$\overline{\text{DTS SCK}}$	O	72	GND	—
13	PACK IN	I	33	GND	—	53	BATT+5V	I	73	GND	—
14	M.S.DET	I	34	NC	—	54	GND	—	74	GND	—
15	GND	—	35	$\overline{\text{DOLBY C}}$	O	55	GND	—	75	GND	—
16	GND	—	36	$\overline{\text{DOLBY B}}$	O	56	NC	—	76	PACK DOWN	I
17	GND	—	37	LCD CE	O	57	GND	—	77	RUN DET	I
18	AREA 0	I	38	DTS CE	O	58	X1	I	78	KEY-IN AD0	I
19	AREA 1	I	39	DTS START	O	59	X2	O	79	KEY-IN AD1	I
20	TP ALARM	O	40	NOSE POWER	O	60	$\overline{\text{RESET}}$	I	80	KEY-IN AD2	I

75099W04 : IC504

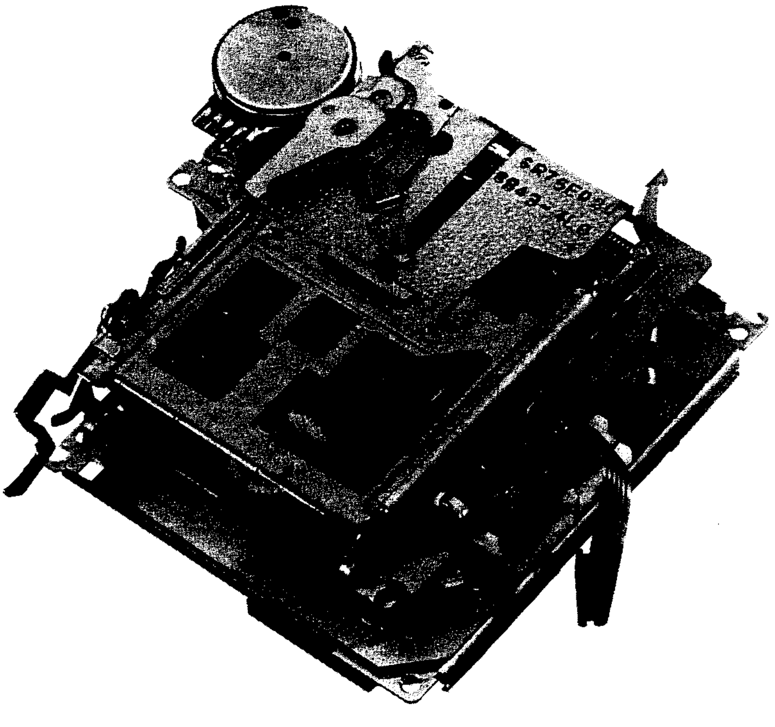


PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O	PIN NO.	CODE ADDRESS	I/O
1	LW	O	21	NC	—	41	NC	—	61	RDS CLK	I
2	LO/$\overline{\text{DX}}$	O	22	NC	—	42	NC	—	62	RDS DATA	I
3	NC	—	23	NC	—	43	NC	—	63	DTS CE	I
4	AV_{SS}	—	24	NC	—	44	NC	—	64	NC	—
5	$\overline{\text{LPF SW}}$	O	25	NC	—	45	NC	—	65	NC	—
6	IF MUTE	O	26	NC	—	46	NC	—	66	NC	—
7	AV_{REF1}	I	27	NC	—	47	NC	—	67	50K REF	O
8	PLL UP	—	28	NC	—	48	NC	—	68	V_{DD}	—
9	NC	—	29	NC	—	49	NC	—	69	X2	O
10	NC	—	30	NC	—	50	NC	—	70	X1	I
11	PLL CLK	O	31	NC	—	51	NC	—	71	V_{SS}	—
12	PLL DATA	O	32	NC	—	52	NC	—	72	NC	—
13	PLL CE	O	33	V_{SS}	—	53	NC	—	73	PLL D-IN	I
14	DTS MUTE	O	34	NC	—	54	NC	—	74	AV_{DD}	—
15	DTS START	I	35	NC	—	55	NC	—	75	AV_{REF0}	I
16	DTS CMD	I	36	NC	—	56	NC	—	76	S.METER	I
17	DTS STATUS	O	37	NC	—	57	NC	—	77	ADJ-ON	I
18	DTS CLOCK	I	38	NC	—	58	FM/$\overline{\text{AM}}$	O	78	MULTI PATH	I
19	NC	—	39	NC	—	59	AUDIO IN	I	79	$\overline{\text{ST}}$	I
20	NC	—	40	NC	—	60	$\overline{\text{RESET}}$	I	80	SD	I

ALPINE SERVICE MANUAL

Exploded View & Parts List
For
Cassette Deck Mechanism

ADDENDUM & REVISED



GR SERIES

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List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY
1	(M1.2 x 3.5 x 0.25)	04A41345P01	8
2	(M1.7 x 3.5 x 0.25)	04A41345P02	1
3	(M2.1 x 5 x 0.25)	04A41345P06	1
4	(M1.2 x 2.5 x 0.25)	04A41345P11	8
5	(M1.7 x 3.5 x 0.35)	04A41345P12	2
6	(M1.2 x 3.5 x 0.35)	04A41345P15	1
7	(M1 x 2.5 x 0.25)	04A41345P17	1
8	(M2.6 x 5 x 0.25)	04A41345P29	1
9	(M3.1 x 8 x 0.05)	04A41345P30	1
10	(M1.7 x 3 x 0.25)	04A41345P31	1
11	(M3.1 x 5 x 0.35)	04A41345P32	2

List of Usable Oil

1) Molykote E paste
2) Grease EM-30L
3) Grease FLOIL 425A

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   (M-300 or AT-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.
(2) Remove M1 lock washer ① as shown in Figure 1.
(3) Remove three screws ② as shown in Figure 1.
(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.
(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.
(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.
(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.
(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.
(9) Turn the mechanism around as shown in Figure 3.
(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.
(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)
(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figure 4 and 5.)
(13) Fix the screws and the lock washer that have been removed.

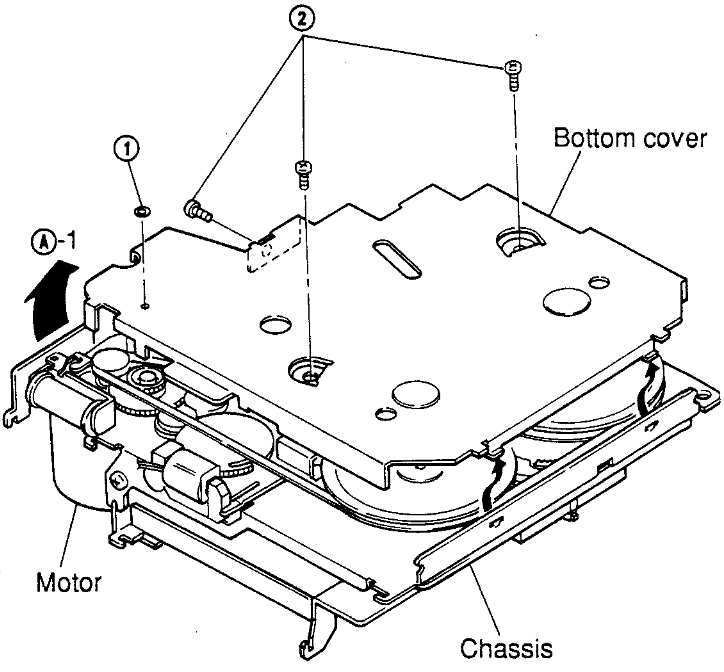


Figure 1

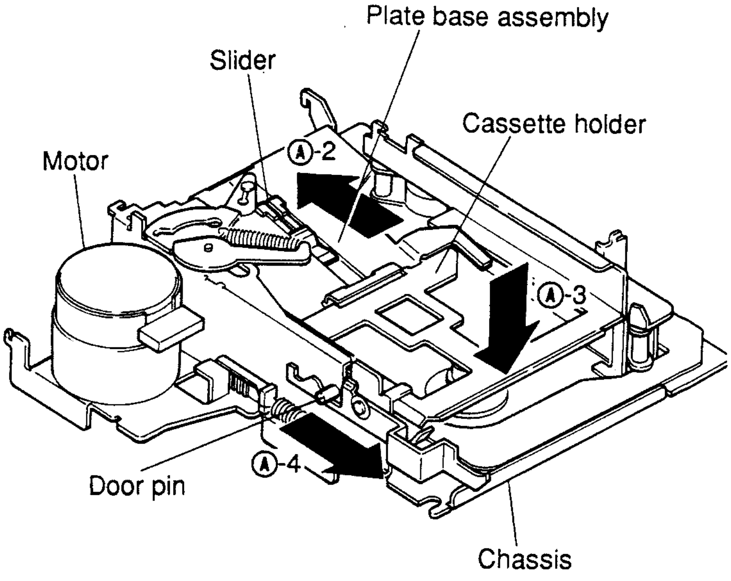


Figure 2

(14)Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg/cm.

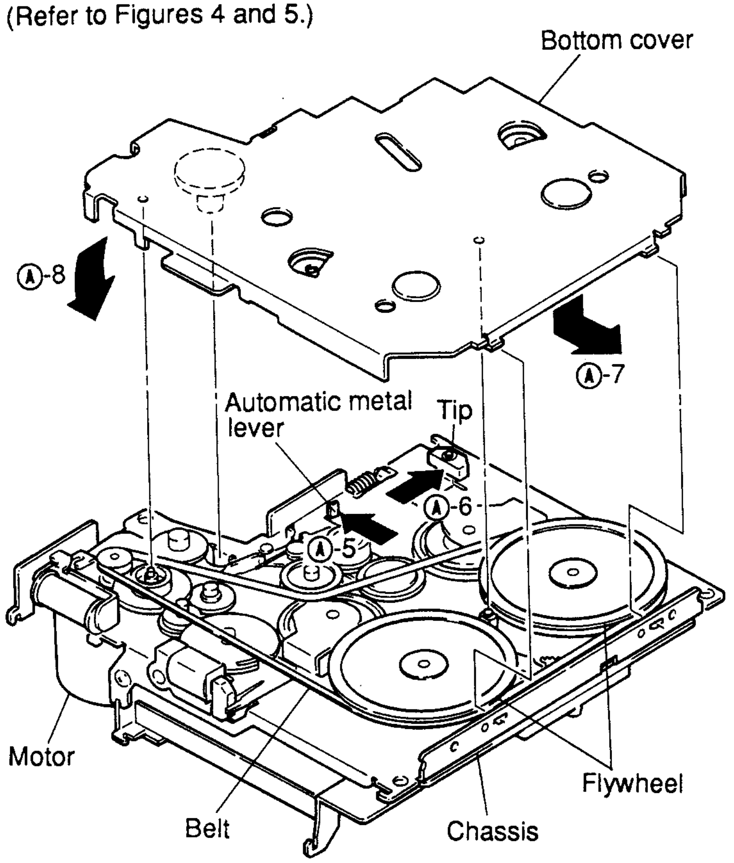

Bottom cover
Ⓐ-8
Ⓐ-7
Automatic metal lever
Tip
Ⓐ-6
Ⓐ-5
Motor
Belt
Chassis
Flywheel

Figure 3

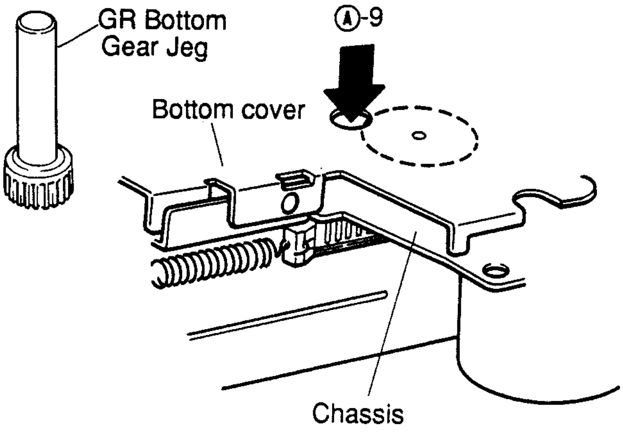

GR Bottom Gear Jeg
Ⓐ-9
Bottom cover
Chassis

Figure 4

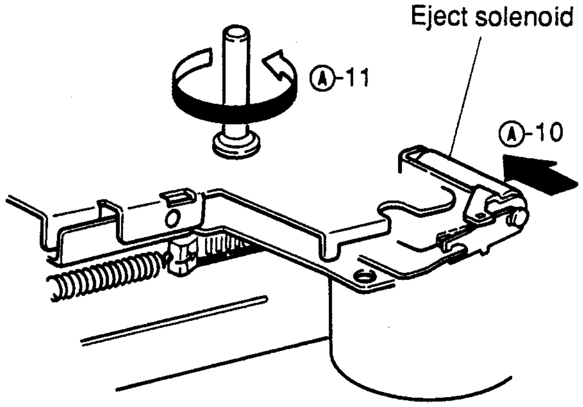

Eject solenoid
Ⓐ-11
Ⓐ-10

Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear

(1) Remove M1.2 lock washer ③ as shown in Figure 6.
(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.
(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid

(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.
(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° +/– 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

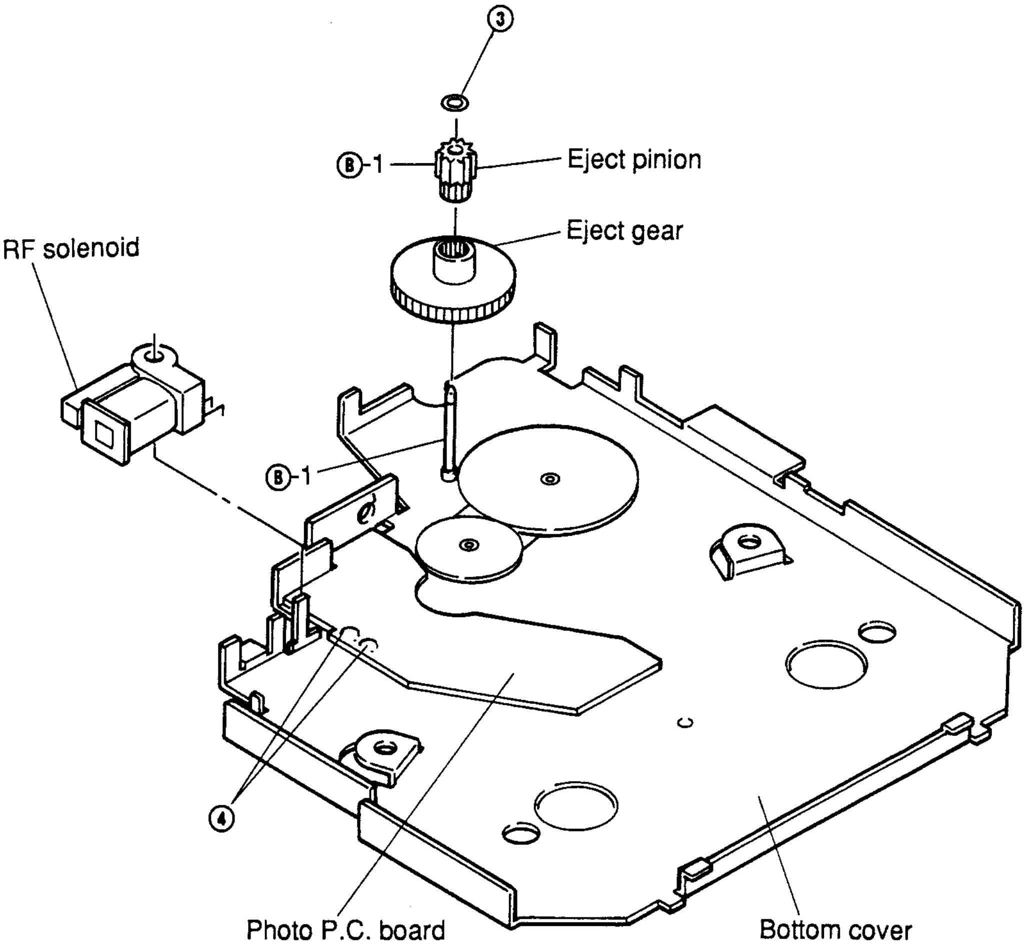


Figure 6

c. Replacement of the photo sensor

(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo PC board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked ⑧-2 as shown in Figure 7.
(4) Insert the photo guide into the PC board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° +/– 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch
(Automatic metal packing ???)

(1) Remove 2 solders ⑥ with which the the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo PC board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

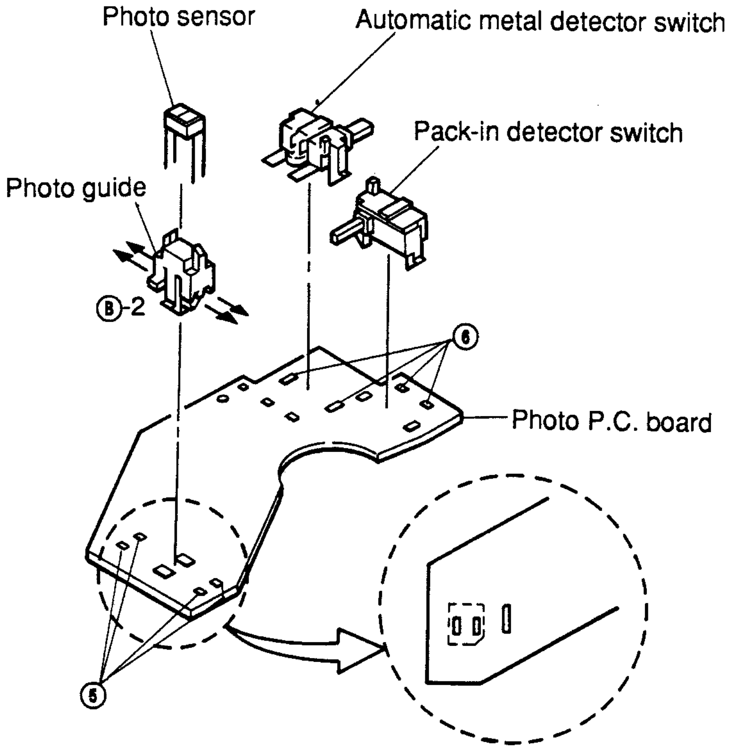


Figure 7

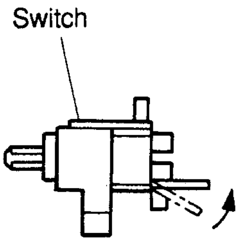


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.
(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

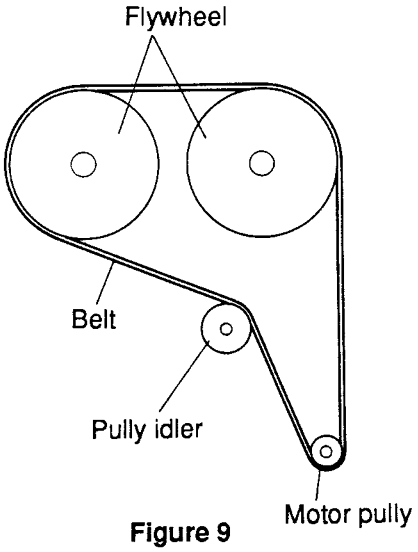

Flywheel
Belt
Pully idler
Motor pully

Figure 9

b. Replacement of the motor

(1) After removing the belt, remove spring ⑦ as shown in Figure 10.
(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control PC board as shown in Figure 11.
(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)
(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

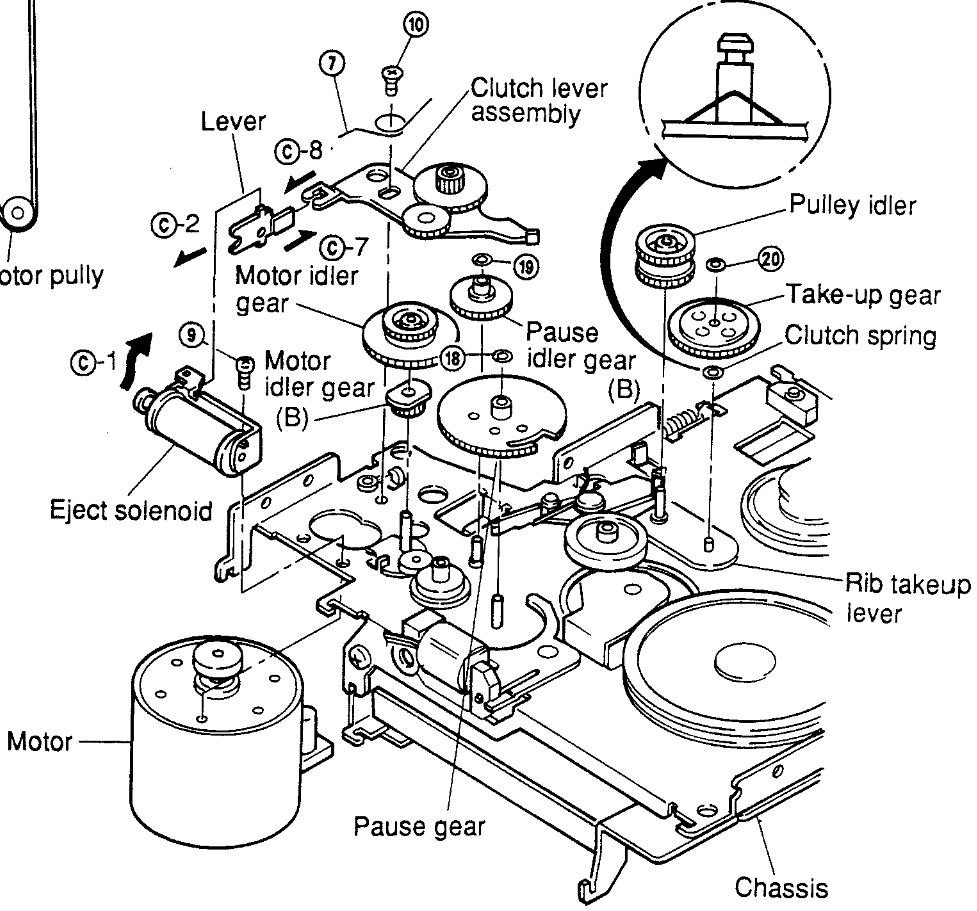

⑩
⑦
Clutch lever assembly
Lever
Ⓒ-8
Ⓒ-2
Ⓒ-7
Motor idler gear
Ⓒ-1
⑨
Motor idler gear (B)
⑲
Pulley idler
⑳
Take-up gear
Clutch spring
Pause idler gear
⑱
Pause idler gear (B)
Eject solenoid
Rib takeup lever
Motor
Pause gear
Chassis

Figure 10

c. Replacement of the flywheels

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

d. Replacement of the play solenoid

(1) Remove the two solders ⑧-2 as shown in Figure 11.

(2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.

(3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.

e. Replacement of the eject solenoid

(1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)

(2) Remove screw ⑨ and remove the play solenoid as shown in Figure 10.

(3) Align position Ⓒ-1 of the new solenoid with position Ⓒ-2 of the lever and fasten the screws as shown in Figure 10.

(4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm. As the solder wires are not insulated, do not let them cross each other.

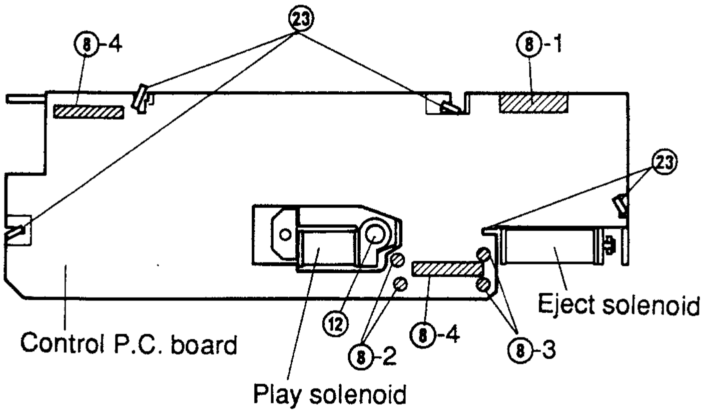


Figure 11

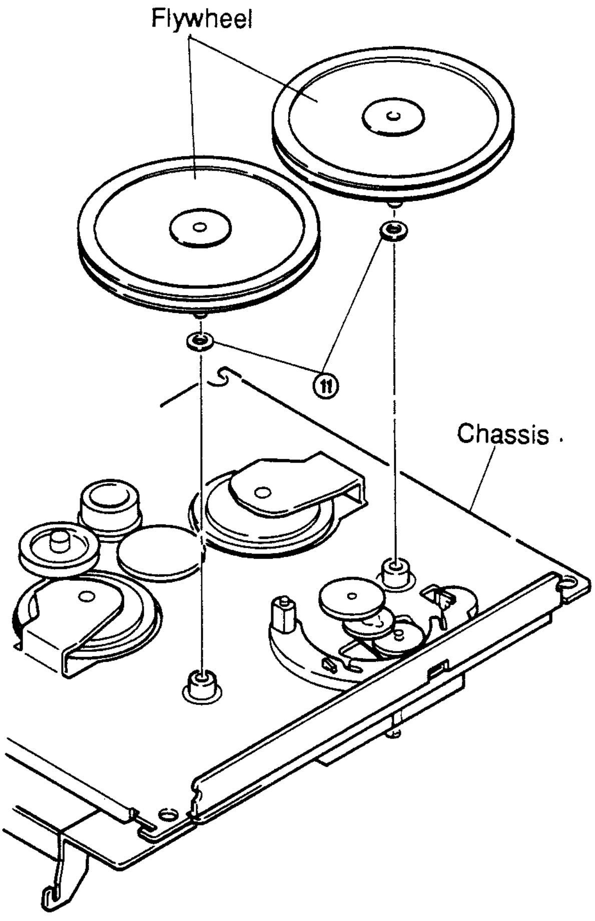


Figure 12

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

1. (1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
2. (2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

1. (1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
2. (2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

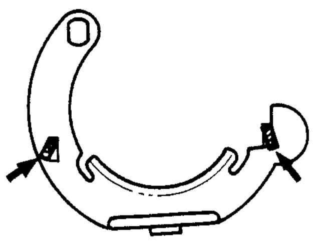
1. (1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ⓒ-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.
2. (2) Insert the section ⓒ-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

1. (1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.
2. (2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.
3. (3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:
After mounting all parts, check if the reverse lever assembly moves in the directions marked ⓒ-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend them into the form of as shown in the Figure.



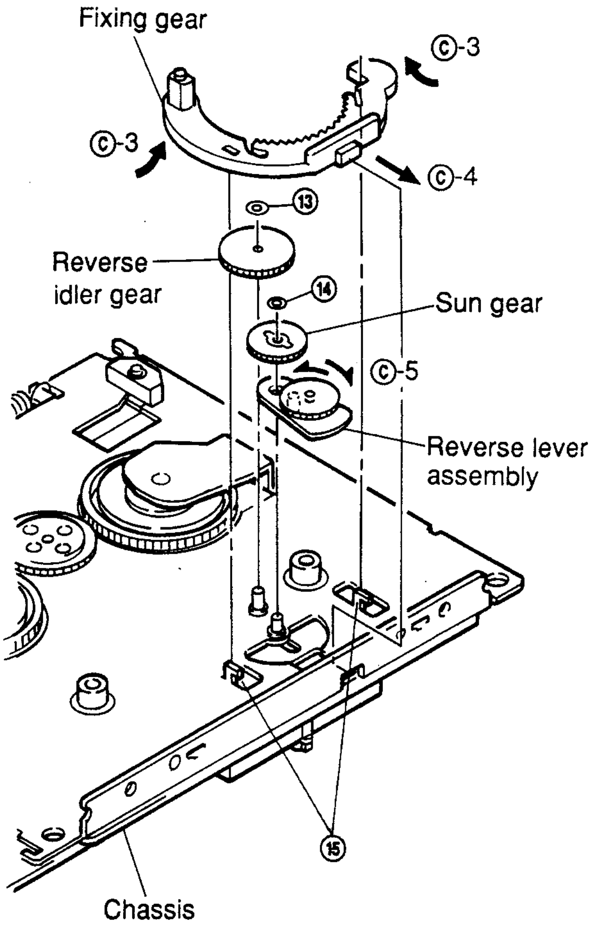


Figure 13

(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.

(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.

(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (FLOIL 425A) to the position ⓒ-6 as shown in Figure 15. Align the position ⓒ-7 with the position ⓒ-8 and mount the clutch lever as shown in Figure 10.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.

(2) Mount the new gear following the removal steps in the reverse order.

(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.

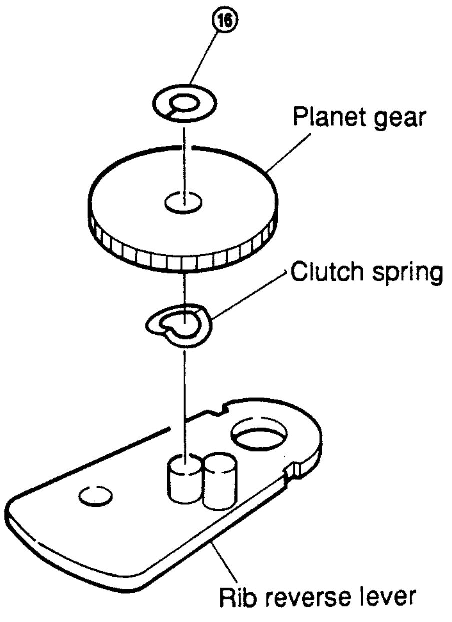
(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the rib take-up lever assembly as shown in Figure 10.

(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:
Do not reuse the used washers. Take care to avoid damage by piercing and tearing.



[Disassembly Reverse Lever Assembly]

Figure 14

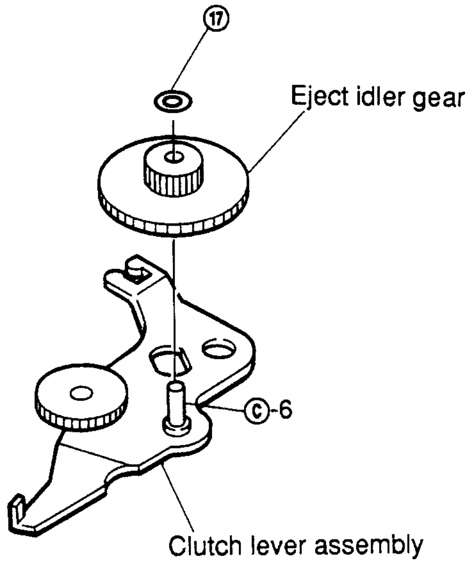


Figure 15

4. Replacement of the parts mounted on the front of the chassis

a. Replacement of the audio PC board

(1) Remove two solders ㉑ and remove the parallel wire (7P) and the head PC board as shown in Figure 16.

(2) Adjust the two claws ㉒ to the rectangular holes on the PC board and remove the PC board as shown in Figure 16.

(3) After replacement, mount the new PC board following the removal steps in the reverse order.

Note: The head PC board and the parallel wires are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head PC board.

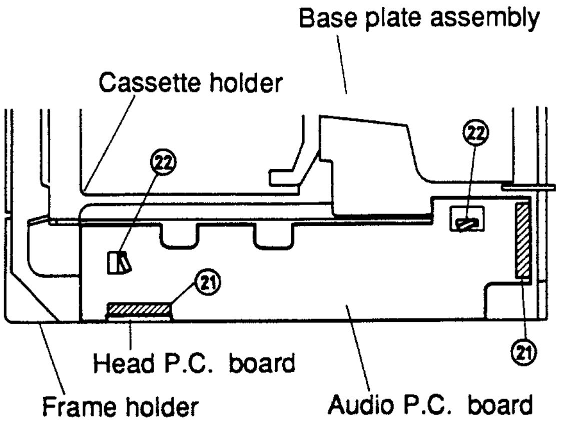

Base plate assembly
Cassette holder
㉒
㉒
㉑
㉑
Head P.C. board
Frame holder
Audio P.C. board

Figure 16

b. Replacement of the control PC board

(1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.

(2) Remove the claws ㉓ and remove the PC board as shown in Figure 11.

(3) After replacing the old PC board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

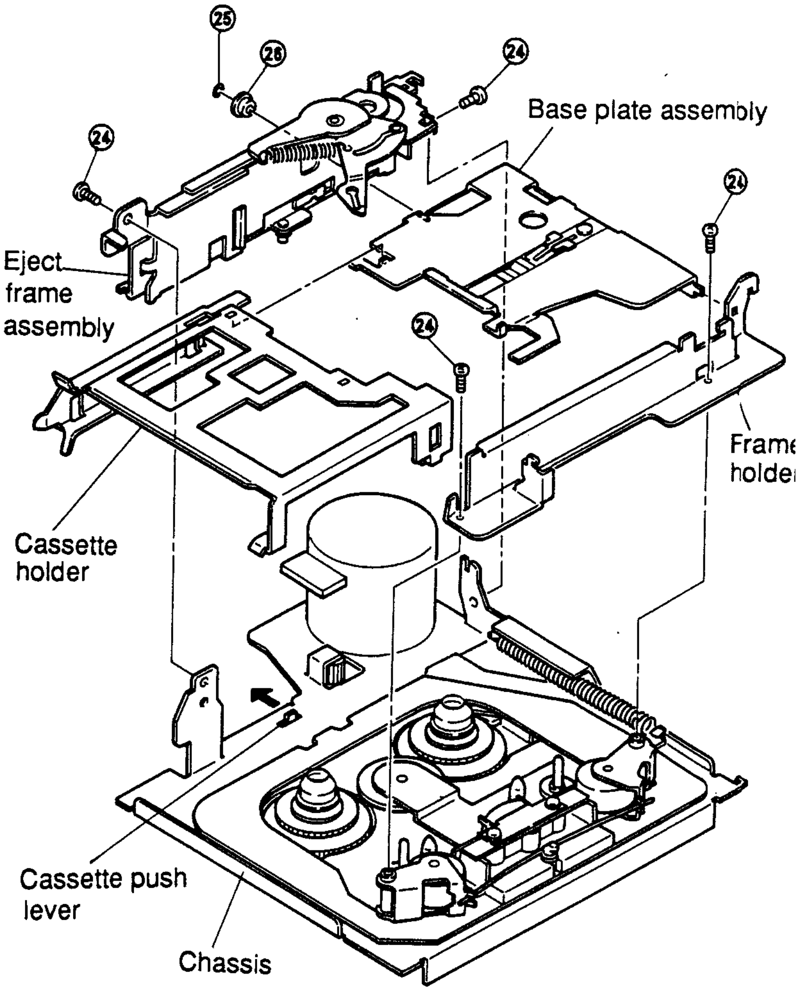

㉕
㉖
㉔
㉔
Base plate assembly
㉔
Eject frame assembly
㉔
Frame holder
Cassette holder
Cassette push lever
Chassis

Figure 17

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.

(2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.

(3) Remount them following the removal steps in the reverse order.

Notes:

1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).
2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.
3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.
4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

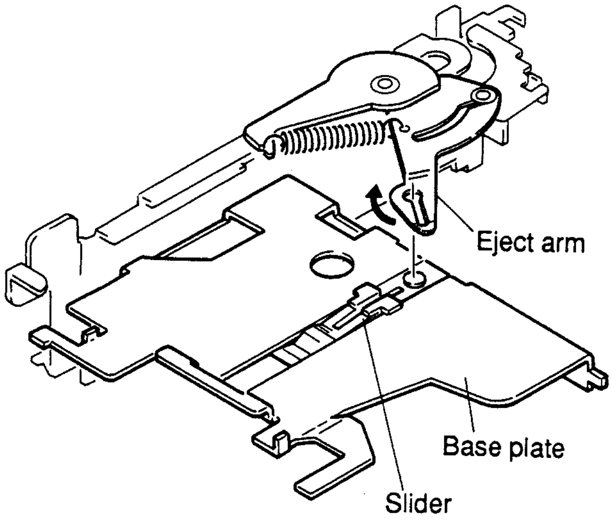


Figure 18

d. Replacement of the reels

(1) Remove M1.7 lock washers ㉖ (Refer to figure 19).

(2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.

(3) After replacement, mount the new reels following the removal steps in the reverse order.

(4) After mounting, check the tape speed and the wow and flutter with test tape MTT-III.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

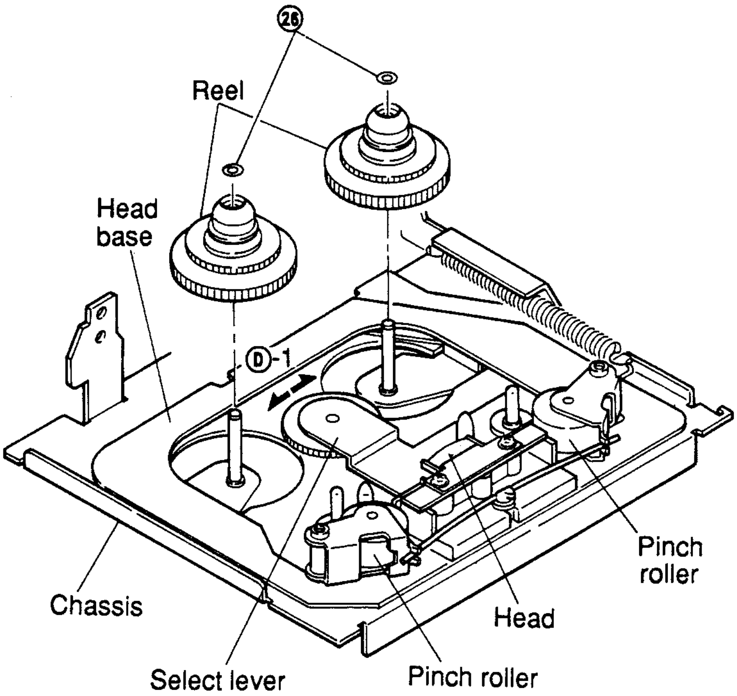


Figure 19

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ㉗ as shown in Figure 20.

(2) Remove M3.1 lock washers ㉘ and remove the pinch roller as shown in Figure 20.

(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

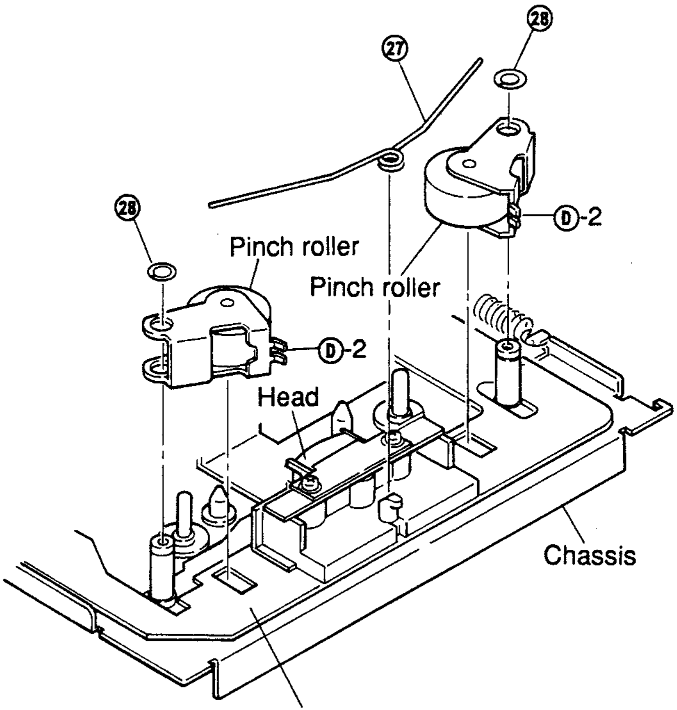


Figure 20

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.

(2) Remove solder ㉚ and remove the head from the head PC board as shown in Figure 22.

(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head PC board. Make sure that the head PC board is not lifted.

2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.

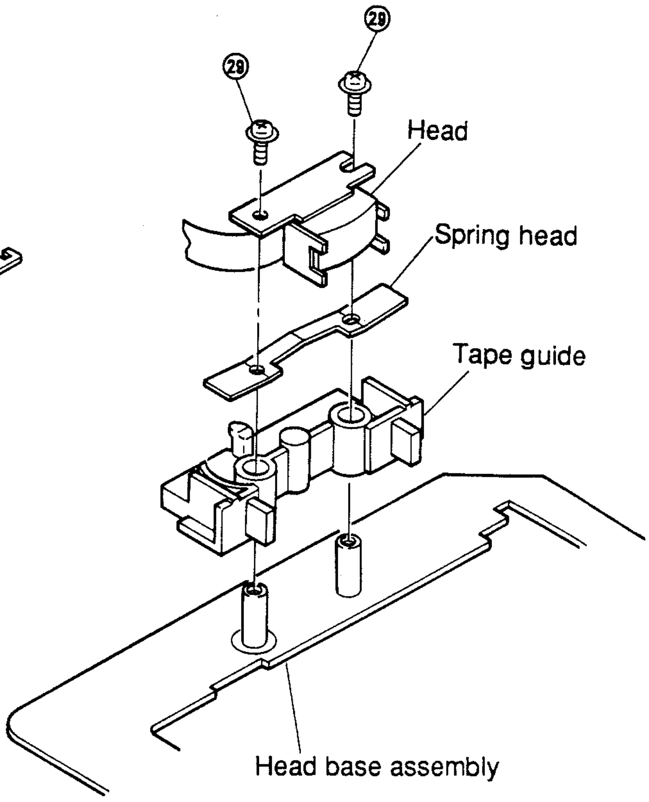


Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.

① Place the height adjustment gauge (M-300 or AT-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

Note: If you do not have a height gauge like described in ④-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

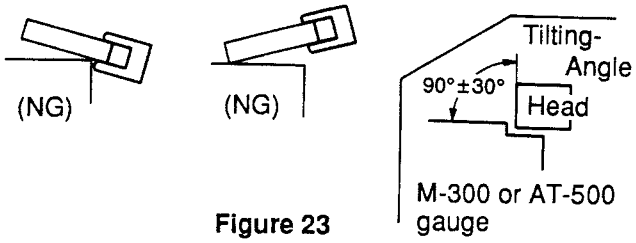

(NG)
(NG)
Tilting-Angle
90°±30°
Head
M-300 or AT-500 gauge

Figure 23

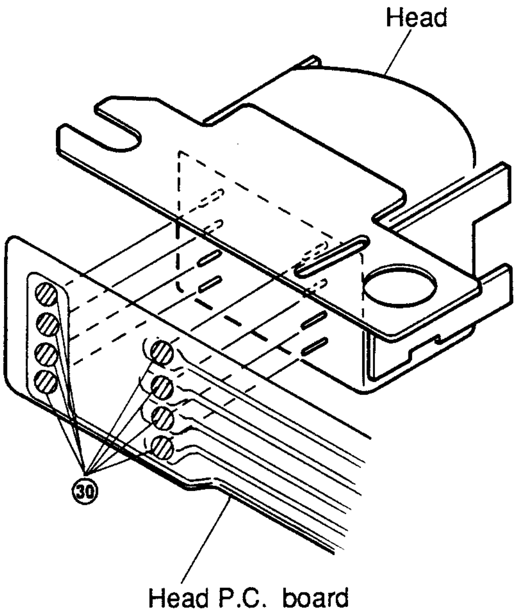

Head
30
Head P.C. board

Figure 22

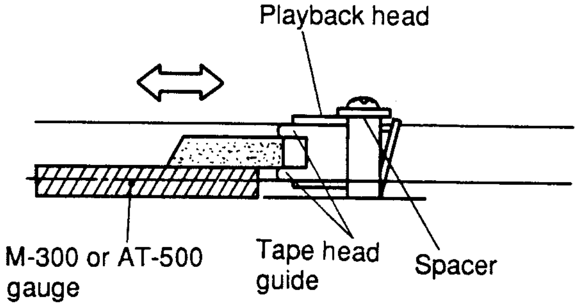
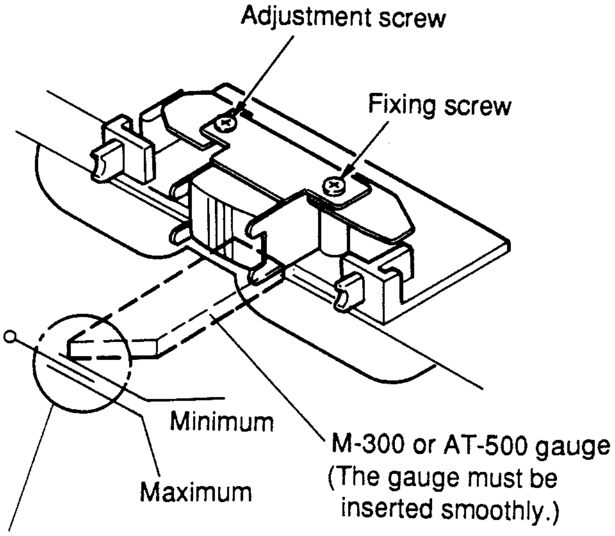

Playback head
M-300 or AT-500 gauge
Tape head guide
Spacer

Figure 24

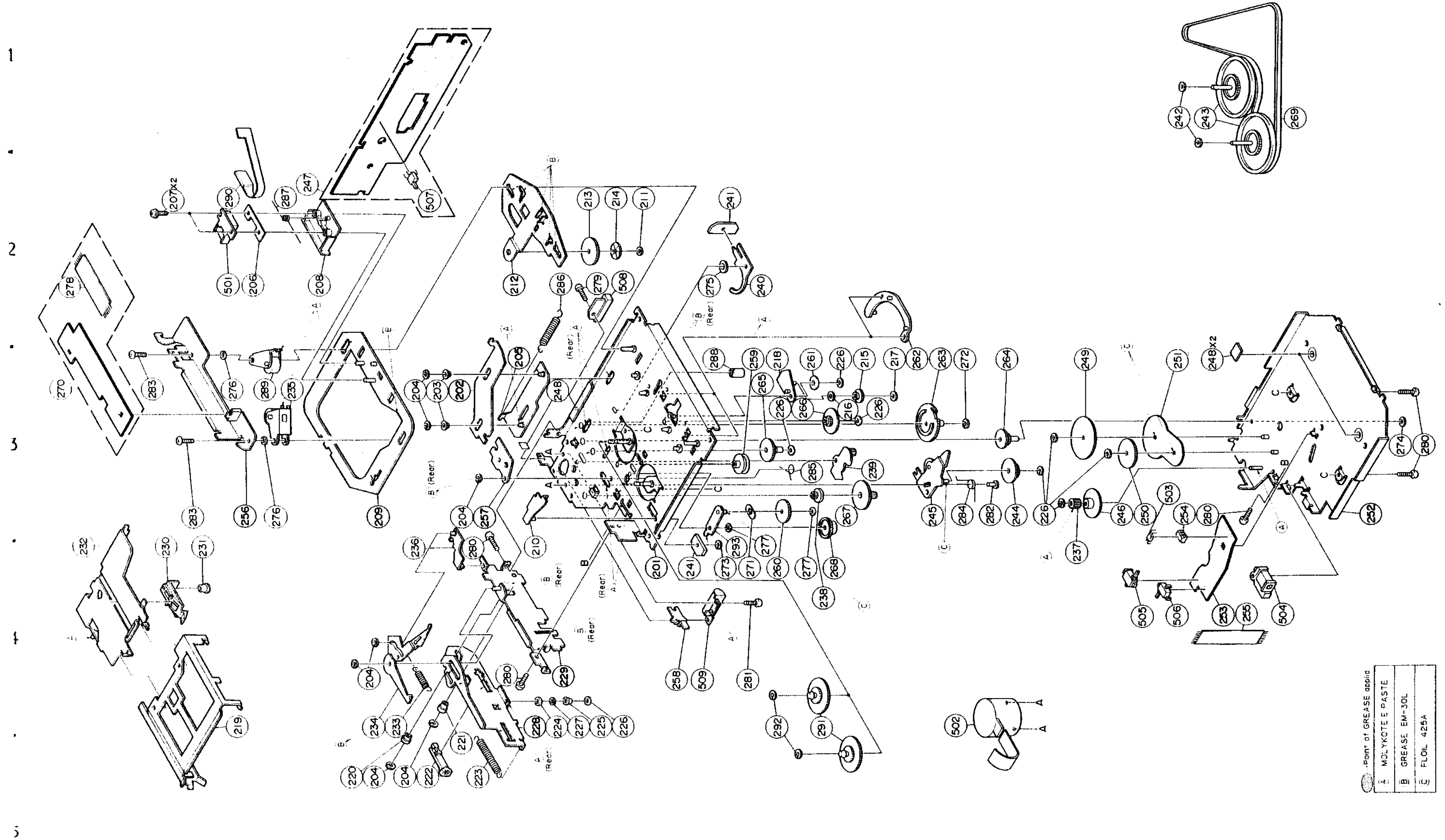

Adjustment screw
Fixing screw
Minimum
Maximum

M-300 or AT-500 gauge (The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (Cassette Deck)


1
2
3
4
5
207×2
290
287
247
507
501
206
208
278
270
283
276
289
235
283
256
276
209
212
213
214
211
286
279
508
204
203
202
205
248
241
240
275
288
259
218
261
226
215
217
262
263
272
264
249
251
248×2
265
226
266
216
226
285
239
245
284
282
244
226
246
250
503
254
280
252
274
280
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237
505
506
253
255
504
258
509
281
292
291
502
204
234
233
280
229
228
224
227
225
226
220
204
204
222
221
223
A
B
C
(Rear)

⬭	·Point of GREASE applid
Ⓐ	MOLYKOTE E PASTE
Ⓑ	GREASE EM-30L
Ⓒ	FLOIL 425A

Cassette Deck Assembly Parts List

Note : The parts without part numbers are not supplied.

Symbol No.	IN-dex	Part No.	Description		
203	3-C	43A11072W01	Roller, Sub Head		
204		04A41345P01	Washer, Lock(M1.2)		
206	2-B	41A10095W01	Spring, Head		
207	2-B	03S40019G03	Screw, F-Locks(M2x4)		
208	2-B	43B12545W01	Tape, Guide		
210	4-C	01A10206W01	Assy.,Riv Lever R/F Sol		
211	2-D	04A41345P29	Washer, Lock(M2.6)		
213	2-D	44A10295W01	Gear, Sensor		
214	2-D	14A10681W01	Reflector		
215	3-E	44A10142W01	Gear, Planet		
216	3-E	41A10097W02	Spring, Clutch		
217	3-E	04A41345P31	Washer, Lock(M1.7)		
218	3-E	01A10203W01	Assy., Riv Lever Reverse		
219	4-B	07B10074W01	Holder, Cassette		
220	5-B	43A12583W01	Roller, Eject		
221	5-C	43A63281F01	Roller, Plate Base		
222	5-C	44A82206F01	Rack		
223	5-C	41B10386W03	Spring, GR(Rack)		
224	4-C	43A10121W01	Roller, Eject A		
225	4-D	43A10360W01	Roller, Eject B		
226		04A41345P11	Washer, Lock(M1.2)		
227	4-D	43A12377W01	Roller, Eject C		
230	4-A	45B10376W01	Slider		
231	4-B	47A63278F01	Shaft, Slider		
232	4-A	01A10212W01	Assy.,Riv Plate Base		
233	4-C	41B10386W01	Spring, Eject Arm		
234	4-B	01A10148W01	Assy., Riv Eject Arm A		
235	3-B	01B10381W02	Assy., Pinch Roller		
236	4-C	01A10202W01	Assy., Riv Lever Pack In SW		
237	4-F	44A12975W01	Pinion, Eject		
238	4-E	44A13617W01	Gear, Motor Idler(B)		
239	3-E	01A10201W01	Assy., Riv Lever Pause		
240	2-D	45A10092W01	Lever, Play		
241		76T10374W01	Chip		
242	1-G	04S40075G05	Washer Polyslider (M2.1)		
243	1-G	01A10368W01	Assy., Flywheel		
244	3-F	44A10141W01	Gear, Eject Idler		
245	3-E	01A10205W01	Assy., Riv Lever Clutch A		
246	3-F	44A10145W01	Gear, Eject		
247	2-B	01V11500W18	Assy., GR Control		

Symbol No.	IN-dex	Part No.	Description		
248		43A90918F01	Spacer, Polyslider		
249	3-F	44A11063W01	Gear, Bottom A		
250	3-F	44A11064W01	Gear, Bottom B		
251	3-G	04A11122W01	Washer, GR		
254	3-G	15B11065W01	Guide, Photo		
255	4-G	30T15126W01	Wire, PC Sensor(7P)		
258	4-D	45A10101W01	Lever, Eject Sol		
259	3-D	49A10131W01	Pulley, Idler		
260	4-E	44A10133W01	Gear, Take Up		
261	3-E	44A10134W01	Gear, Sun		
262	3-E	44B10135W01	Gear, Fix		
263	3-E	44B10136W01	Gear, Pause		
264	3-F	44A10137W01	Gear, Pause Idler A		
265	3-D	44A10379W01	Gear, Pause Idler B		
266	3-E	44A10138W01	Gear, Reverse Idler		
267	3-E	44A10139W01	Gear, Motor Idler		
268	4-E	44A11062W01	Gear, Reel Idler		
269	1-G	42A10380W01	Belt, GR		
● 270	3-A	01V14700W68	Assy., GR Audio		
■ 270	3-A	01V11500W19	Assy., GR Audio		
▲ 270	3-A	01V11500W19	Assy., GR Audio		
271	4-D	41A10097W02	Spring, Clutch		
272	3-F	04A41345P15	Washer, Lock(M1.2)		
273	4-D	04A41345P02	Washer, Lock(M1.7)		
274	3-H	04A41345P17	Washer, Lock(M1)		
275	2-D	04A41345P30	Washer, Lock(M3.1)		
276	3-B	04A41345P32	Washer, Lock(M3.1)		
277		04A41345P06	Washer, Lock(M2.1)		
278	2-A	30T15126W02	Wire, PC Joint 7P		
279	2-D	03S44205G78	Screw, Pan(M2x6)		
280		03S44205G30	Screw, Pan(M2.6x4)		
281	4-D	03S72235F38	Screw, Pan(M2x3.3)		
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)		
283		03S43997P64	Screw, Pan(M1.7x3)		
284	3-F	41A10384W01	Spring, Eject Clutch		
285	3-E	41A10385W01	Spring, Cas Push		
286	2-C	41B10386W02	Spring, Sub Head		
287	2-B	41A10387W01	SP, Pinch Roller		
288	3-D	43A12719W01	Roller, Pause		
289	3-B	01B10381W01	Assy., Pinch Roller		

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Symbol	No.	IN-dex	Part No.	Description		
	290	2-B	84T10367W01	Panel, Head		
●	291	4-E	01T15164W01	Assy., Reel		
■	291	4-E	01T15164W01	Assy., Reel		
▲	291	4-E	01T15164W02	Assy., Reel		
	292	4-E	04A41345P12	Washer, Lock(M1.7)		
	293	4-D	01A11078W01	Assy., Riv Lever Take Up		
Miscellaneous						
●	501	2-B	88T15971W01	Head		
■	501	2-B	88T10373W01	Head		
▲	501	2-B	88T10373W01	Head		
	502	4-E	01V11500W64	Assy., Motor		
	503	3-G	51T15144W01	Sensor, Photo		
	504	4-G	01T10371W01	R/F Sol. Assy.		
	505	4-F	40T15382W01	SW., Detector (Pack Down)		
	506	4-G	40T15382W01	SW., Detector(Metal)		
	507	2-C	40T15222W01	SW., Detector (Pack In)		
	508	2-D	01T15249W01	Assy., Play Solenoid		
	509	4-D	01T10369W01	Assy., Eject Solenoid		

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

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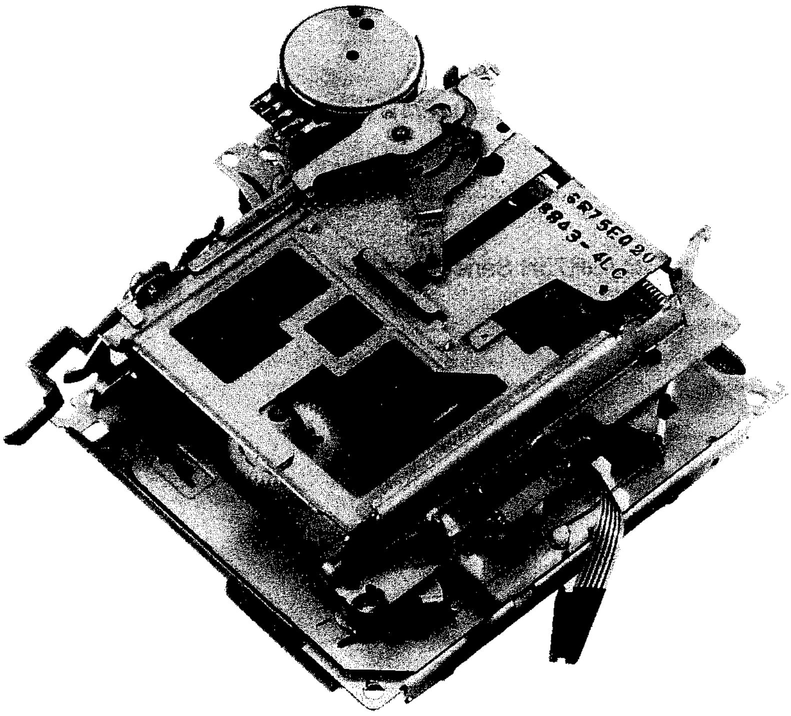
ALPINE SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED(V)



GR/GR-Y SERIES

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Cassette Deck Assembly Parts List (GR75H Series) (4/4) .... 31 to 32

List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY			
			GR75E Series	GR75L Series	GR-Y Series	GR75H Series
1	(M1.2 × 3.5 × 0.25)	04B41345P01	4	4	4	2
2	(M1.7 × 3.5 × 0.25)	04B41345P02	1	1	1	4
3	(M1.2 × 2.5 × 0.25)	04B41345P11	8	8	8	9
4	(M1.7 × 3.5 × 0.35)	04B41345P12	2	2	2	2
5	(M1.2 × 3.5 × 0.35)	04B41345P15	2	2	2	2
6	(M1 × 2.5 × 0.25)	04B41345P17	1	1	1	2
7	(M2.6 × 5 × 0.25)	04B41345P29	1	1	1	1
8	(M3.1 × 8 × 0.05)	04B41345P30	1	1	1	1
9	(M3.1 × 5 × 0.35)	04B41345P32	2	2	2	2
10	(M1.2 × 2.5 × 0.3)	04B41345P34	1	1	1	0
11	(M1.7 × 2.8 × 0.25)	04B41345P35	1	1	1	2
12	(M2.1 × 4 × 0.25)	04B41345P37	1	1	1	0
13	(M2.1 × 4 × 0.13)	04S40075G05	2	2	2	0
14	(M2.1 × 4 × 0.3)	04S40075G58	0	0	0	1

List of Usable Oil

1) Molykote G paste
2) Grease EM-30L
3) Grease PG-671

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   AI-500 (Part No. AI-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.

(2) Remove M1 lock washer ① as shown in Figure 1.

(3) Remove three screws ② as shown in Figure 1.

(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.

(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.

(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.

(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.

(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.

(9) Turn the mechanism around as shown in Figure 3.

(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.

(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)

(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly in the direction Ⓐ-11.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figures 4 and 5.)

(13) Fix the screws and the lock washer that have been removed.

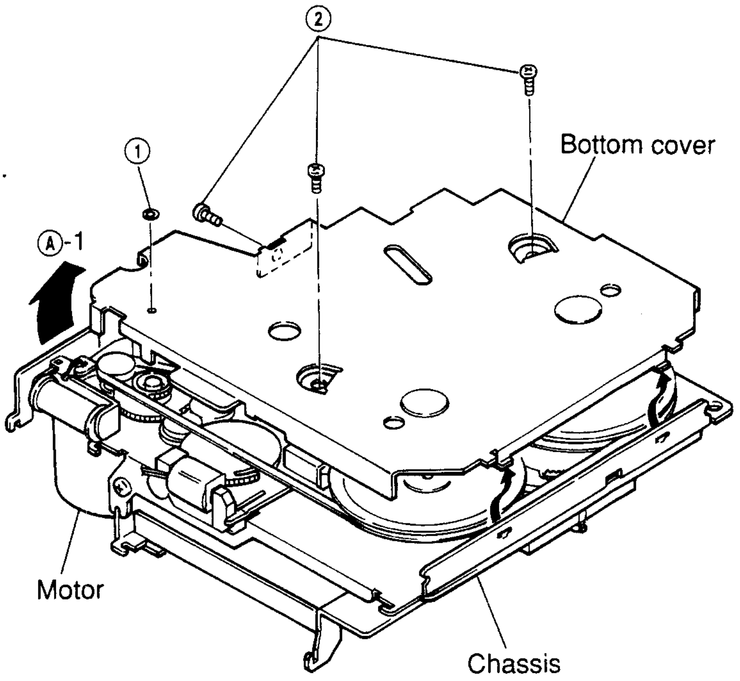


Figure 1

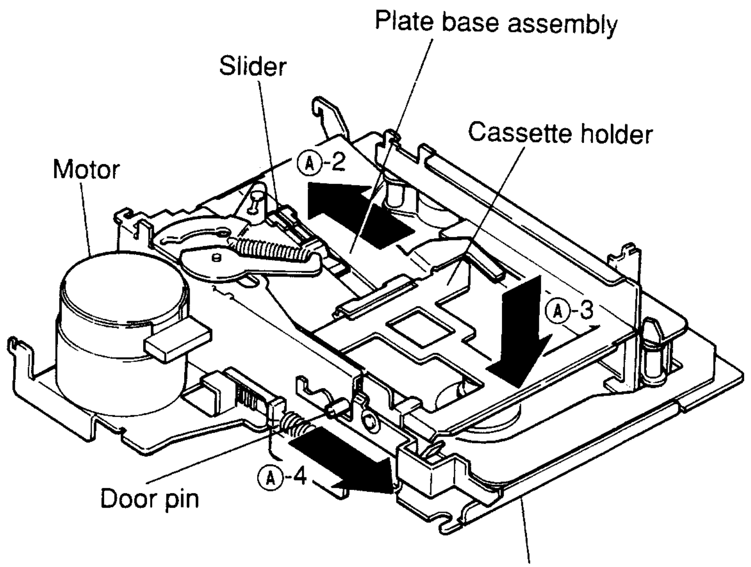


Figure 2

(14) Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg.cm.

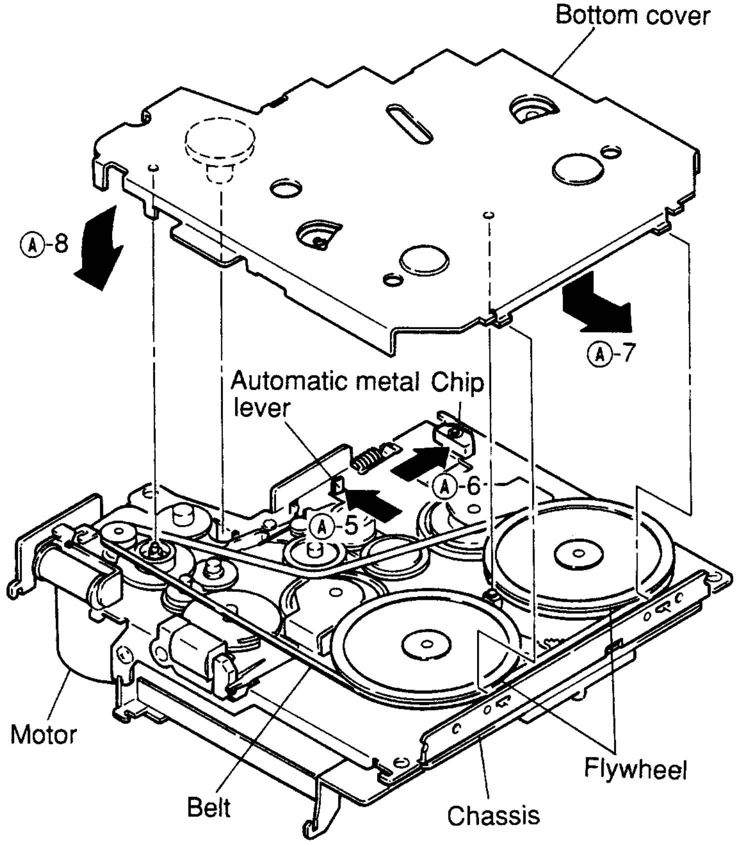


Figure 3

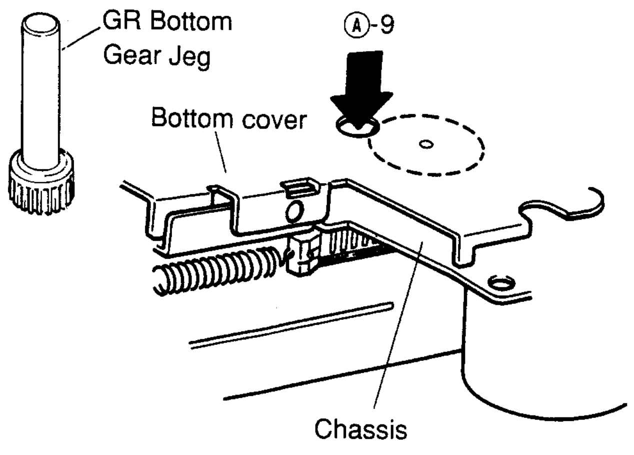


Figure 4

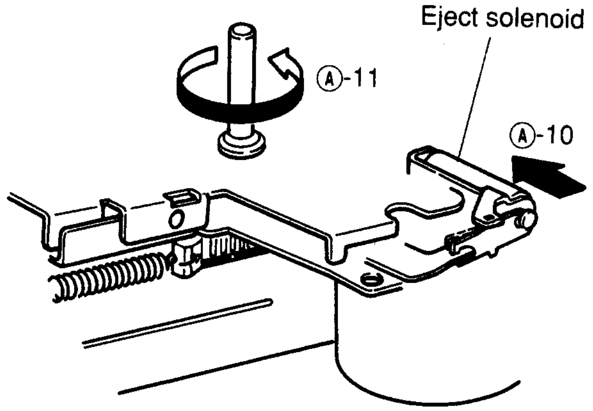


Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear

(1) Remove M1.2 lock washer ③ as shown in Figure 6.
(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.
(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid

(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.
(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

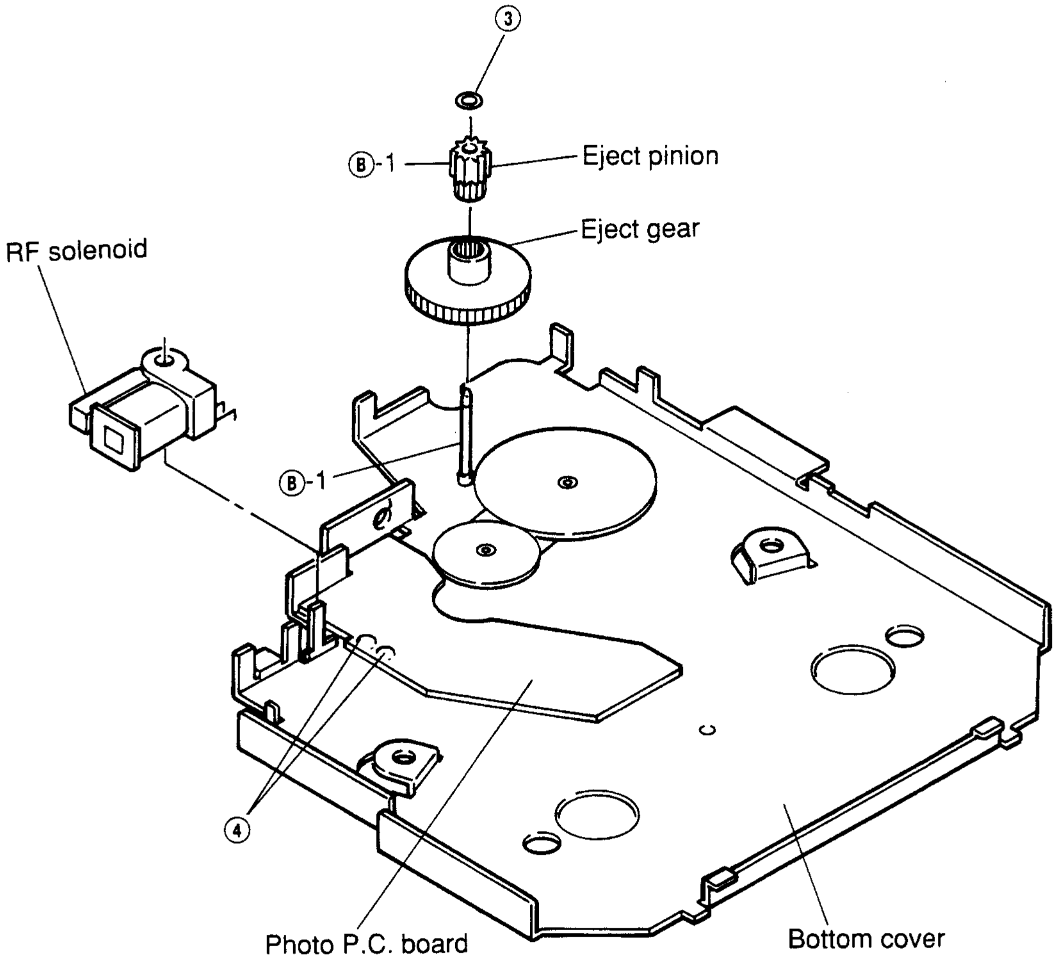


Figure 6

c. Replacement of the photo sensor

(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo P.C. board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked Ⓑ-2 as shown in Figure 7.
(4) Insert the photo guide into the P.C. board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch (Automatic metal pack-in)

(1) Remove 4 solders ⑥ with which the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo P.C. board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

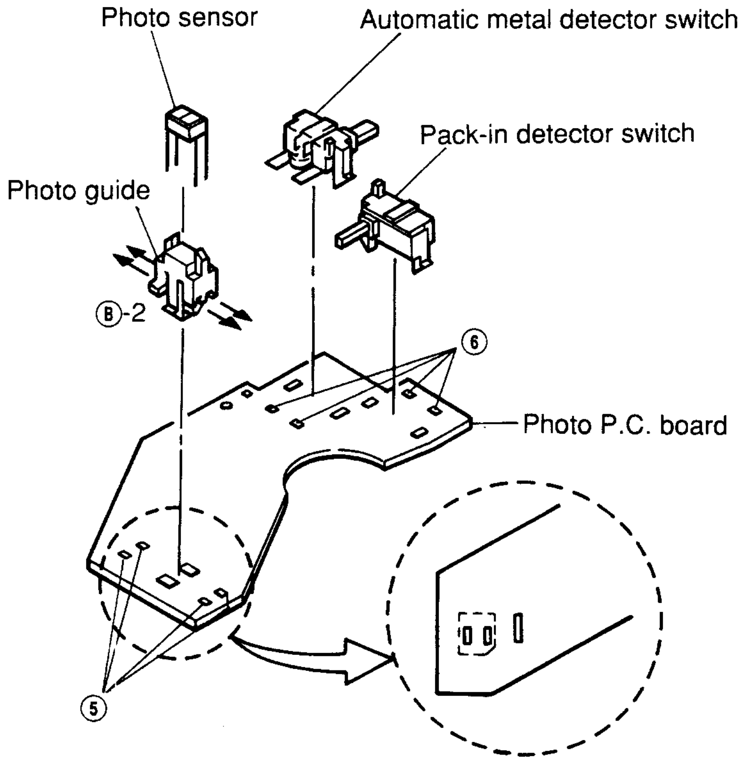


Figure 7

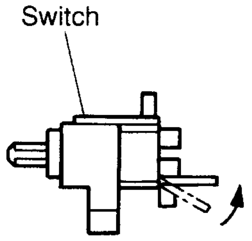


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt

(1) After removing the bottom cover, remove the belt.

(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

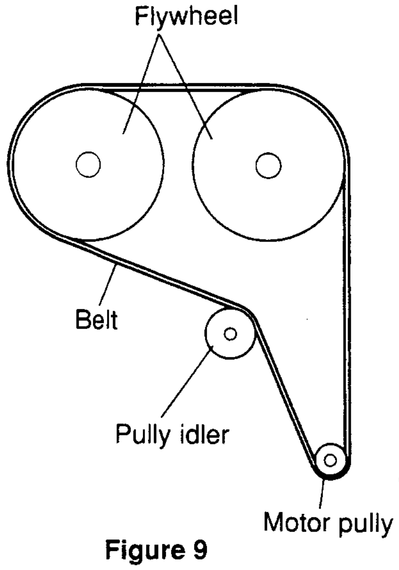

Flywheel
Belt
Pully idler
Motor pully

Figure 9

b. Replacement of the motor

(1) After removing the belt, remove spring ⑦ as shown in Figure 10.

(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control P.C. board as shown in Figure 11.

(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)

(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

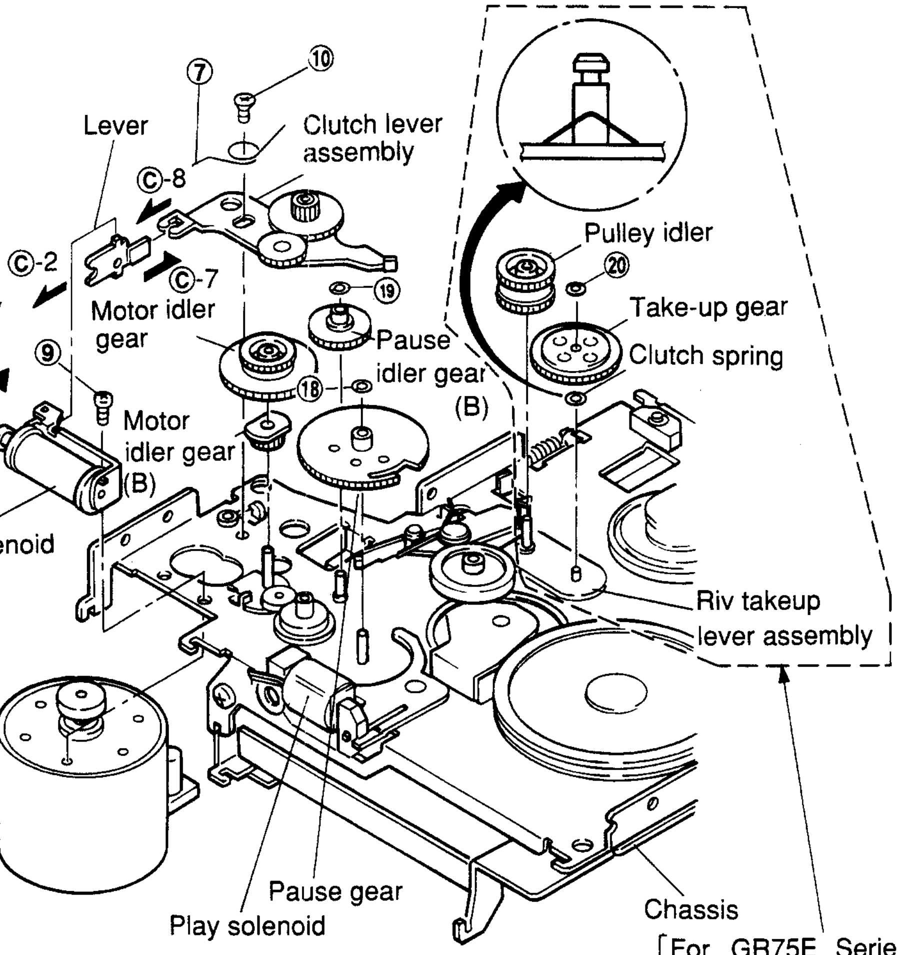

⑦
⑩
Lever
Clutch lever assembly
Ⓒ-8
Ⓒ-2
Ⓒ-7
Motor idler gear
⑲
Pulley idler
⑳
Take-up gear
Clutch spring
Pause idler gear (B)
⑱
⑨
Ⓒ-1
Motor idler gear (B)
Eject solenoid
Riv takeup lever assembly
Motor
Pause gear
Play solenoid
Chassis

Figure 10

[For GR75E Series
GR75L Series
GR-Y Series
models]

c. Replacement of the flywheels

(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)

(2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

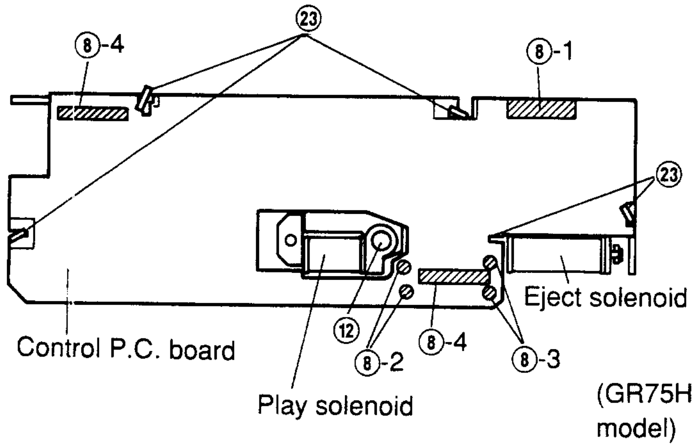
d. Replacement of the play solenoid

(1) Remove the two solders ⑧-2 as shown in Figure 11.

(2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.

(3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.


⑧-4
㉓
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

[For GR75E Series model]

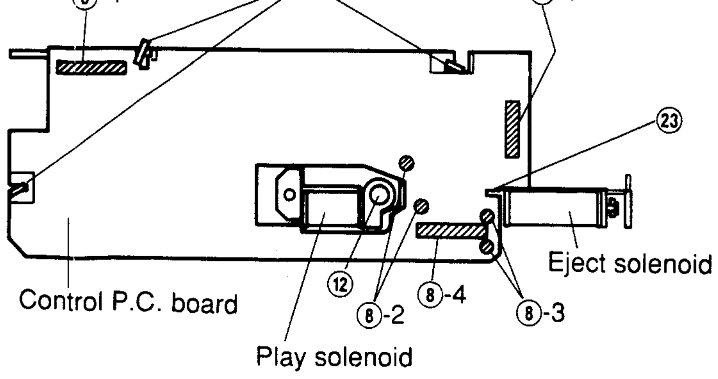

⑧-4
㉓
⑧-1
㉓
Eject solenoid
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Play solenoid

Figure 11

[For GR75L Series
GR-Y Series
GR75H Series models]

e. Replacement of the eject solenoid

(1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)

(2) Remove screw ⑨ and remove the solenoid as shown in Figure 10.

(3) Align position Ⓒ-1 of the new solenoid with position Ⓒ-2 of the lever and fasten the screw as shown in Figure 10.

(4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm.
As the solenoid wires are not insulated, do not let them cross each other.

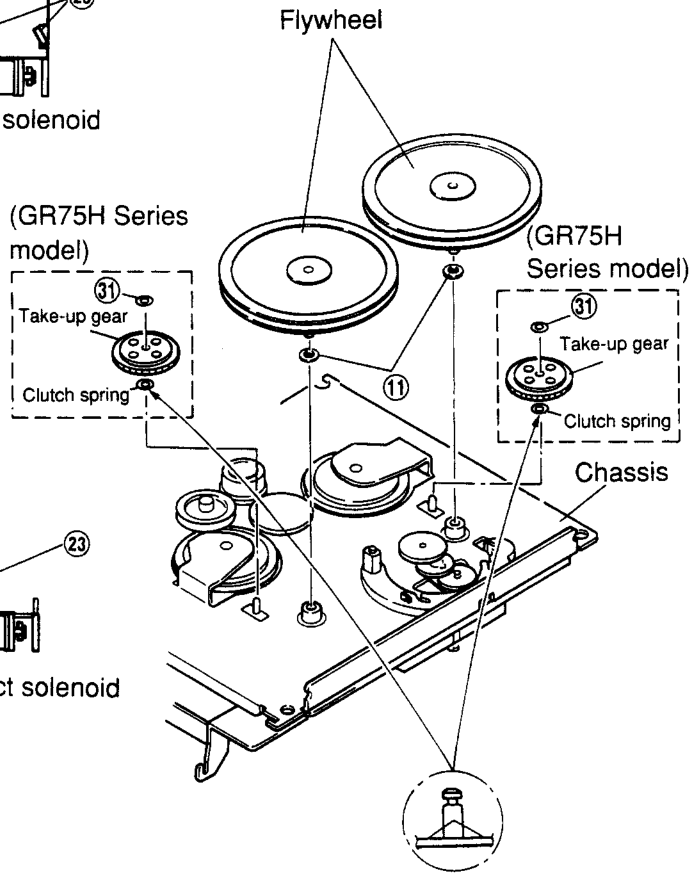

Flywheel
(GR75H Series model)
㉛
Take-up gear
Clutch spring
⑪
(GR75H Series model)
㉛
Take-up gear
Clutch spring
Chassis

Figure 12

1

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

(1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

(1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.
(2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

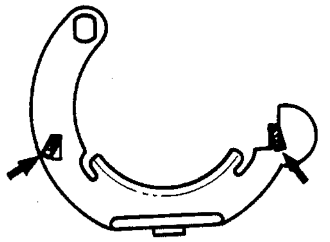
(1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ©-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.
(2) Insert the section ©-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

(1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.
(2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.
(3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:
After mounting all parts, check if the reverse lever moves in the directions marked ©-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend the claws ⑮ into the form of as shown in the Figure.



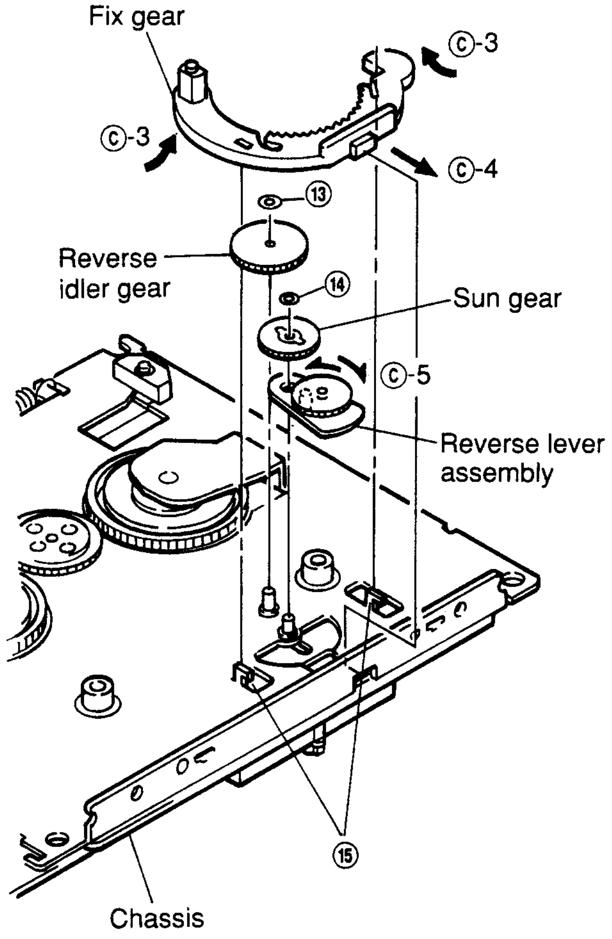


Figure 13

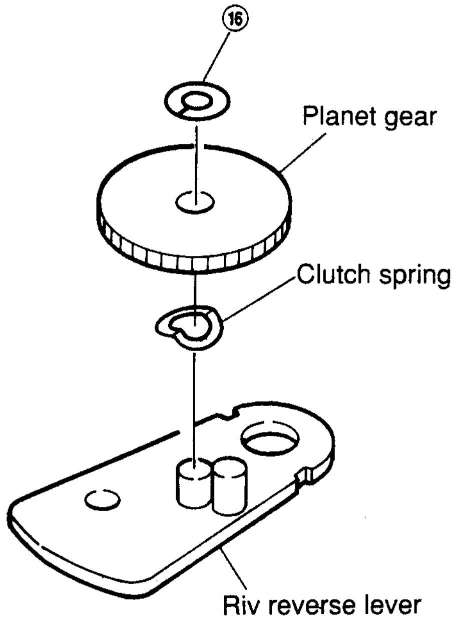
(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.
(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.
(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (PG-671) to the position ©-6 as shown in Figure 15. Align the position ©-7 with the position ©-8 and mount the clutch lever as shown in Figures 10 and 15.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear following the removal steps in the reverse order.



[Disassembly Reverse Lever Assembly]

Figure 14

(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.
(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the riv take-up lever assembly as shown in Figure 10.
After removing the Flywheel, remove M1.2 lock washer ㉛ and remove the gear by pulling it up from the stud of the chassis as shown in figure 12. [For GR75H Series model]
(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:
Do not reus e the used washers. Take care to avoid damage by piercing and tearing.

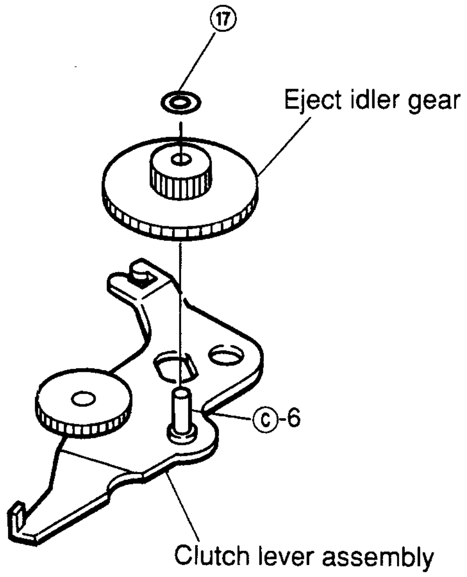


Figure 15

4. Replacement of the parts mounted on the front of the main chassis

a. Replacement of the audio P.C. board
  (1) Remove two solders ㉑ and remove the parallel wire (7P) and the head P.C. board as shown in Figure 16.
  (2) Adjust the two claws ㉒ to the rectangular holes on the P.C. board and remove the P.C. board as shown in Figure 16.
  (3) After replacement, mount the new P.C. board following the removal steps in the reverse order.

Note: The head P.C. board and the parallel wire are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board.

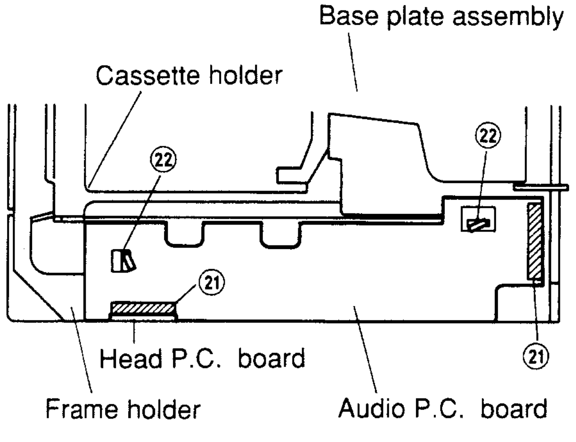


Figure 16

b. Replacement of the control P.C. board
  (1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.
  (2) Remove five claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75E Series model] Remove four claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75L Series, GR-Y Series, GR75H Series models]
  (3) After replacing the old P.C. board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

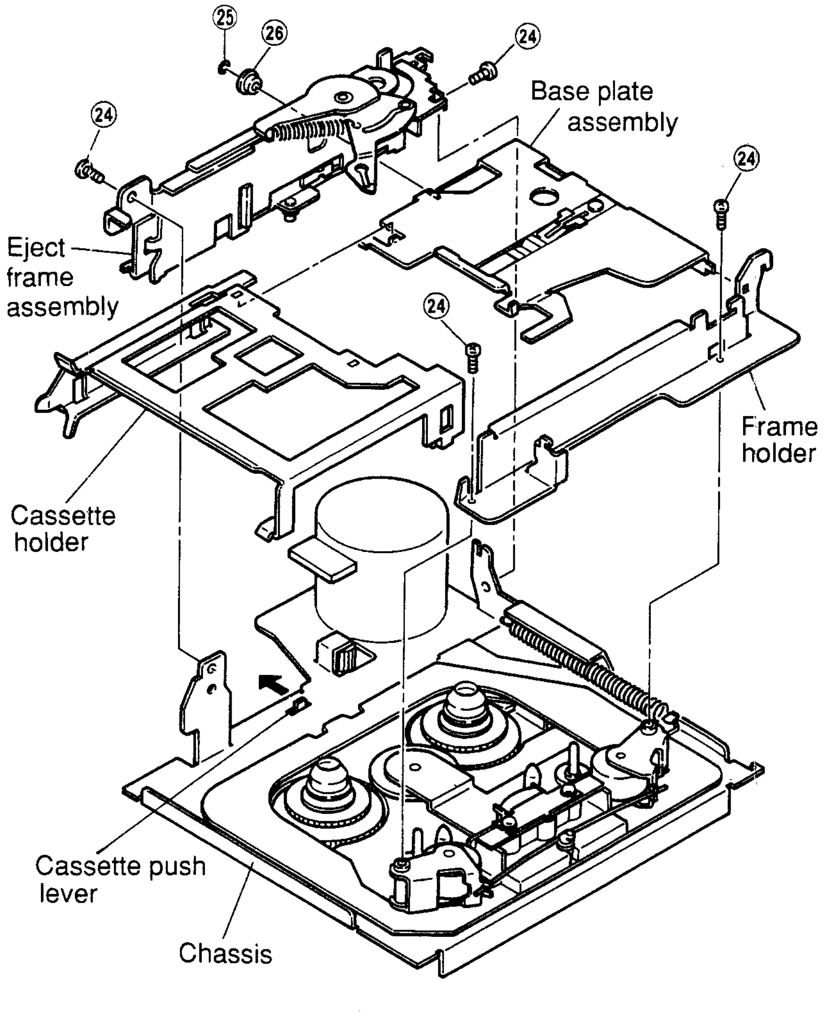


Figure 17

c. Disassembly and assembly of the cassette holder
  (1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.
  (2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.
  (3) Remount them following the removal steps in the reverse order.

Notes: 1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).
2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.
3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.
4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

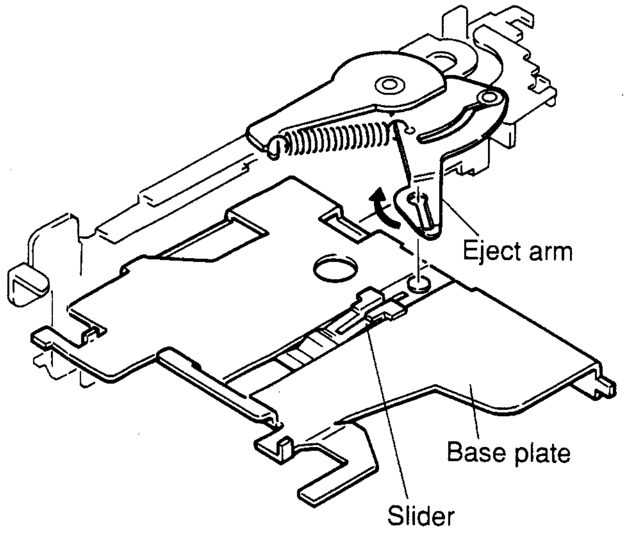


Figure 18

d. Replacement of the reels
  (1) Remove M1.7 two lock washers ㉖ (Refer to figure 19).
  (2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.
  (3) After replacement, mount the new reels following the removal steps in the reverse order.
  (4) After mounting, check the tape speed and the wow and flutter with test tape MTT-111.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

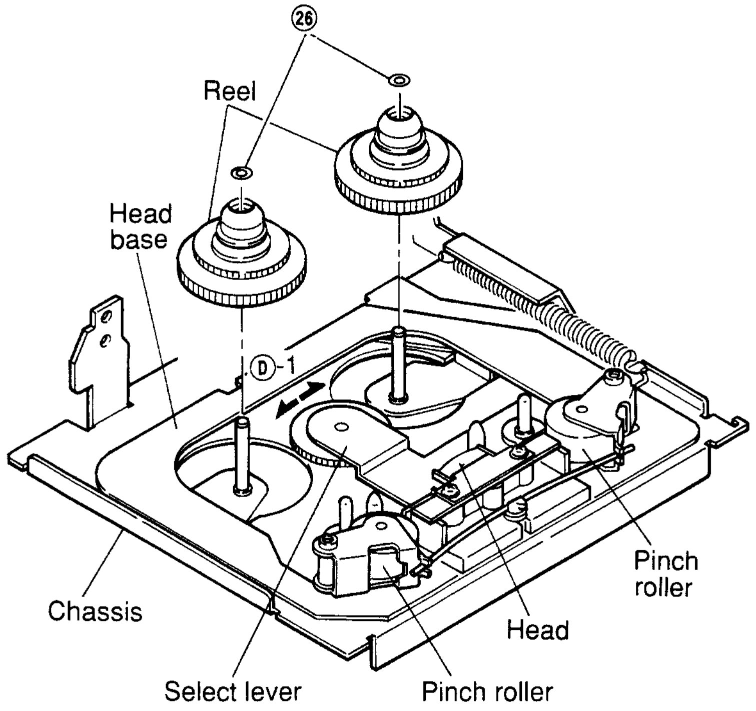


Figure 19

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ㉗ as shown in Figure 20.

(2) Remove M3.1 two lock washers ㉘ and remove the pinch roller as shown in Figure 20.

(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

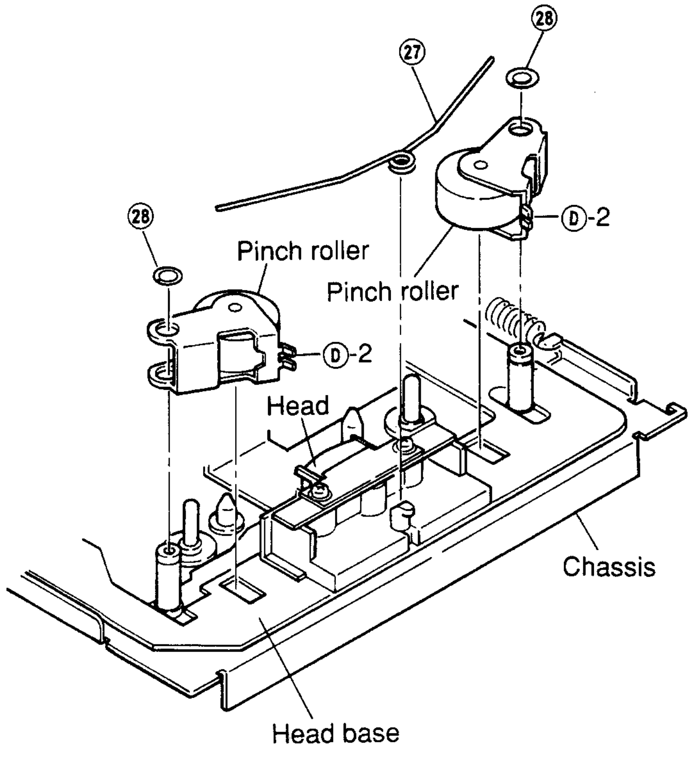

㉘
㉗
㉘
Ⓓ-2
Pinch roller
Pinch roller
Ⓓ-2
Head
Chassis
Head base

Figure 20

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.

(2) Remove solder ㉚ and remove the head from the head P.C. board as shown in Figure 22.

(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board. Make sure that the head P.C. board is not lifted.

2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.

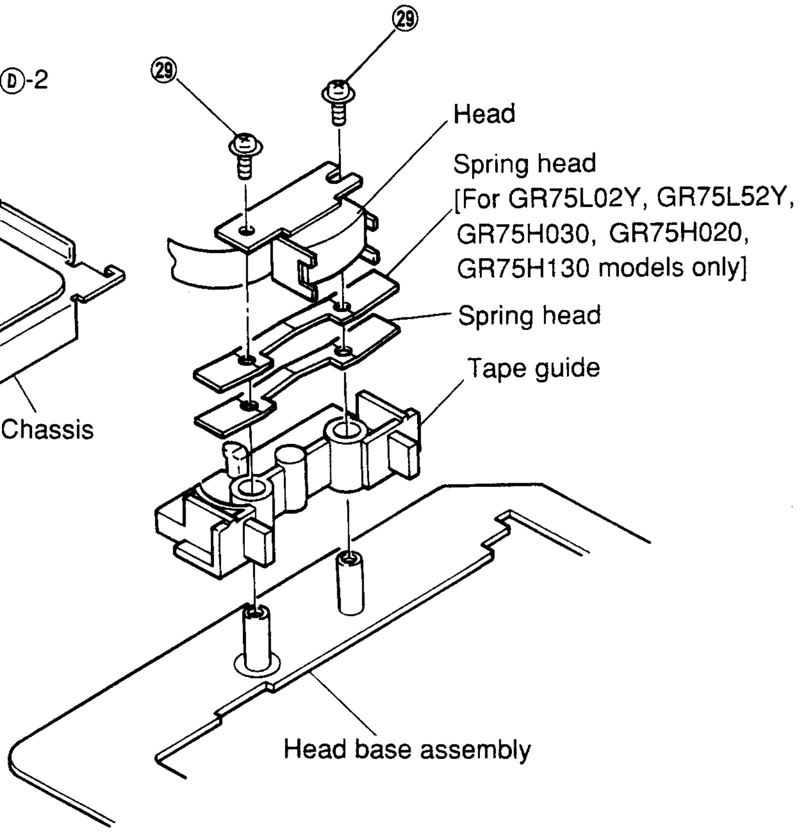

㉙
㉙
Head
Spring head
[For GR75L02Y, GR75L52Y, GR75H030, GR75H020, GR75H130 models only]
Spring head
Tape guide
Head base assembly

Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.

① Place the height adjustment gauge (AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

Note: If you do not have a height gauge like described in (4)-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

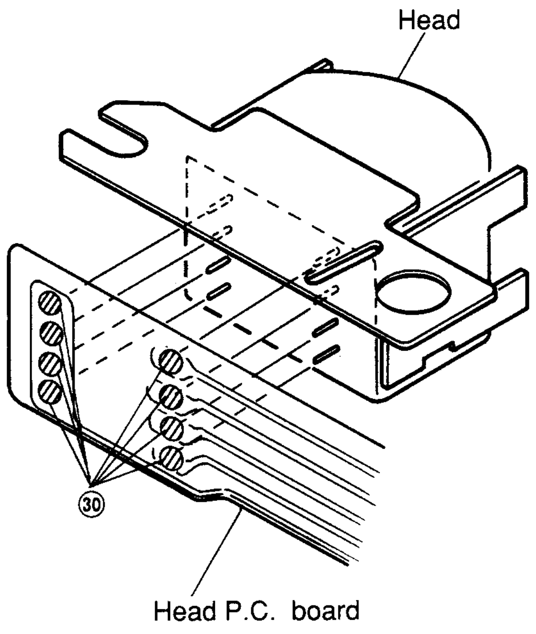

Head
㉚
Head P.C. board

Figure 22

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

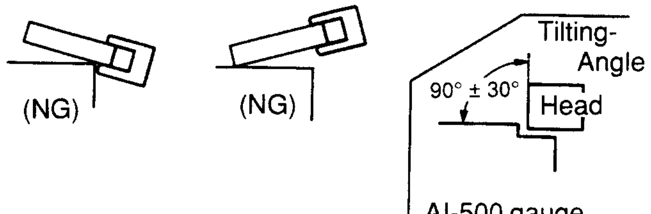

(NG)
(NG)
Tilting-Angle
90° ± 30°
Head
AI-500 gauge

Figure 23

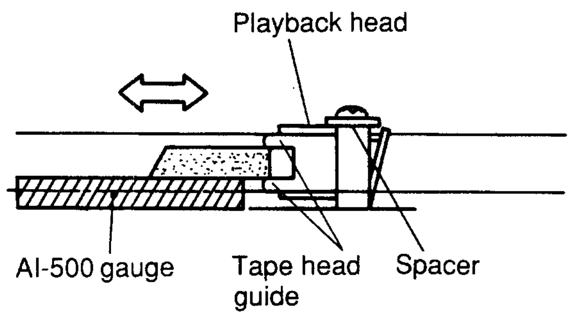
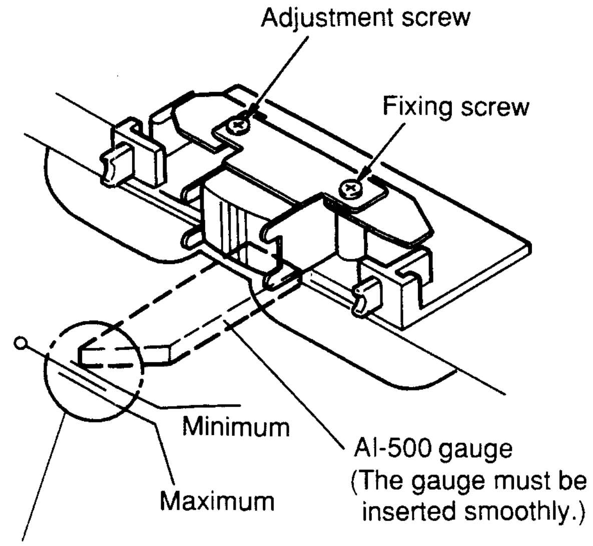

Playback head
AI-500 gauge
Tape head guide
Spacer

Figure 24

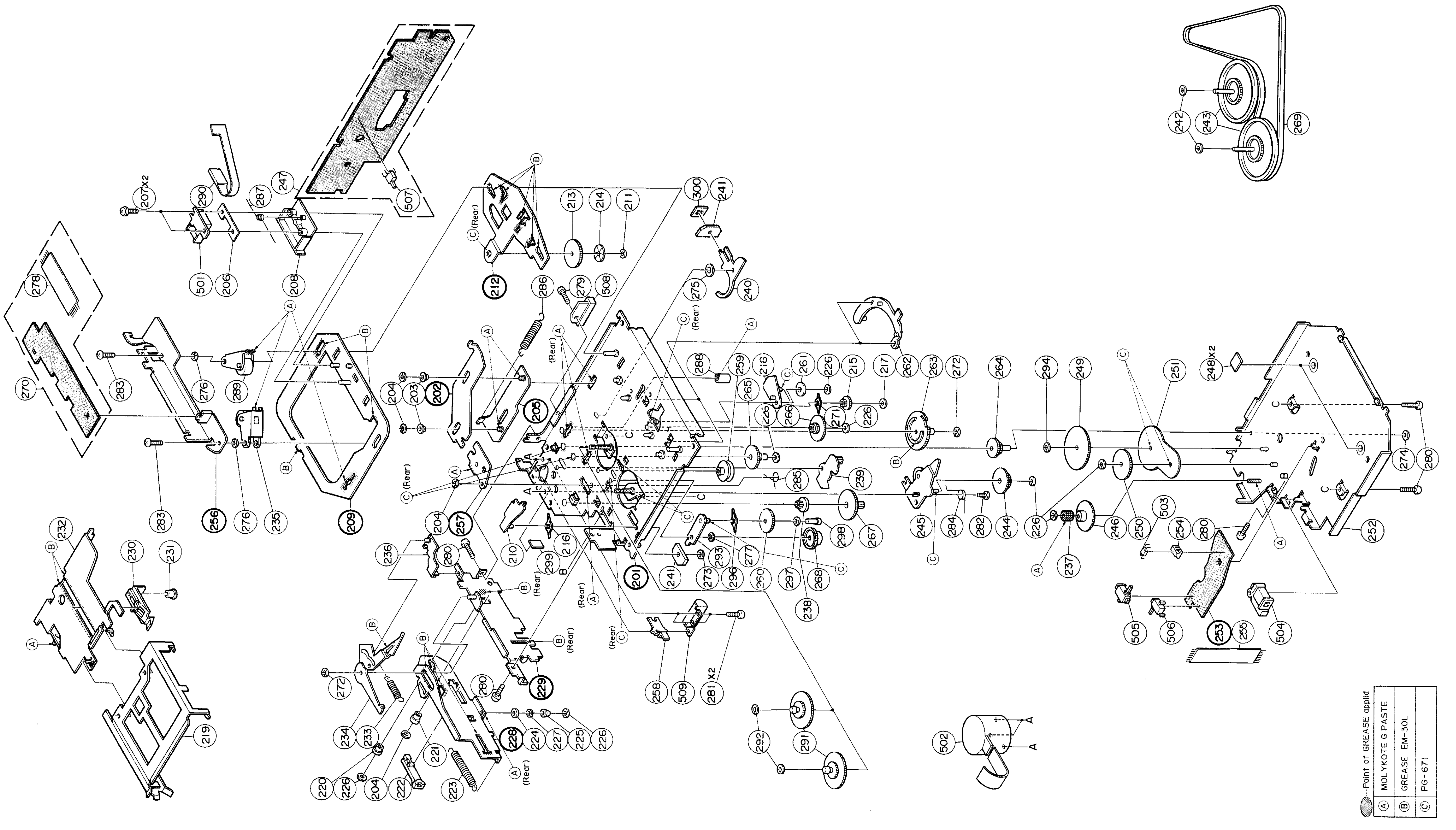

Adjustment screw
Fixing screw
Minimum
Maximum
AI-500 gauge
(The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (GR75E Series) (1/4)

- **For GR75E010/01A/020 Models**


1
2
3
4
5
242
243
269
207×2
290
287
247
507
300
241
213
214
211
Ⓒ(Rear)
Ⓑ
278
501
206
208
212
286
279
508
275
240
Ⓒ (Rear)
Ⓐ
270
283
276
289
Ⓑ
Ⓐ
Ⓐ
(Rear) Ⓐ
288
259
218
261
226
215
217
262
263
272
264
294
249
251
248×2
Ⓒ
204
203
202
205
265
266
271
226
226
Ⓑ
Ⓒ
Ⓑ
283
256
276
235
209
Ⓒ(Rear)
204
257
285
239
245
284
282
244
226
246
250
503
254
280
252
274
280
232
Ⓑ
230
231
236
280
210
299
216
B
201
241
273
293
296
277
260
297
268
298
267
238
Ⓒ
Ⓐ
237
Ⓐ
505
506
253
255
504
Ⓐ
Ⓑ (Rear)
(Rear) Ⓐ
Ⓑ (Rear)
(Rear) Ⓒ
258
509
281×2
Ⓑ
Ⓑ
272
280
229
234
233
221
228
224
227
225
226
292
291
502
A
A
219
220
226
204
222
223
Ⓐ (Rear)

Point of GREASE applid

Ⓐ MOLYKOTE G PASTE

Ⓑ GREASE EM-30L

Ⓒ PG-671

Cassette Deck Assembly Parts List (GR75E Series) (1/4)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roller, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216	3-E	41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
● 219	4-B	07B40283W01	Holder, Cassette
■ 219	4-B	07B40283W01	Holder, Cassette
▲ 219	4-B	07B10074W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject A
225	4-D	43A10360W01	Roller, Eject B
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject C
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy.,Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A10148W01	Assy., Riv Eject Arm A
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever Pack In SW
237	4-F	44A12975W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-D	45A40725W01	Lever, Play Sol
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch A
246	3-F	44A10145W01	Gear, Eject
247	2-B	01V11500W18	Assy., GR Control P.C. Board
248	3-G	43A41656W01	Spacer, UHMW
249	3-F	44A11063W01	Gear, Bottom A
250	3-F	44A11064W01	Gear, Bottom B
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B30484W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler A
265	3-D	44A10379W01	Gear, Pause Idler B
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
● 270	3-A	01V14700W68	Assy., GR Audio P.C. Board
■ 270	3-A	01V11500W19	Assy., GR Audio P.C. Board
▲ 270	3-A	01V11500W19	Assy., GR Audio P.C. Board
271	3-E	41A30475W01	Spring, Clutch
272		04B41345P15	Washer, Lock(M1.2)
273	4-D	04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276		04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas Push
286	2-C	41B10386W02	Spring, Sub Head

Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Symbol No.	IN-dex	Part No.	Description
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T25151W01	Head P.C. Board
291	4-E	01T35403W01	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer Lock(M1.2)
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	4-C	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid
Miscellaneous			
● 501	2-B	88T15971W01	Head
■ 501	2-B	88T10373W01	Head
▲ 501	2-B	88T10373W01	Head
502	4-E	01V11500W64	Assy., Motor(Main, 13.2V-80mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy.
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector(Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes:● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only Others ; Common

Exploded View (GR75L Series) (2/4)

- **For GR75L020/02A Models**

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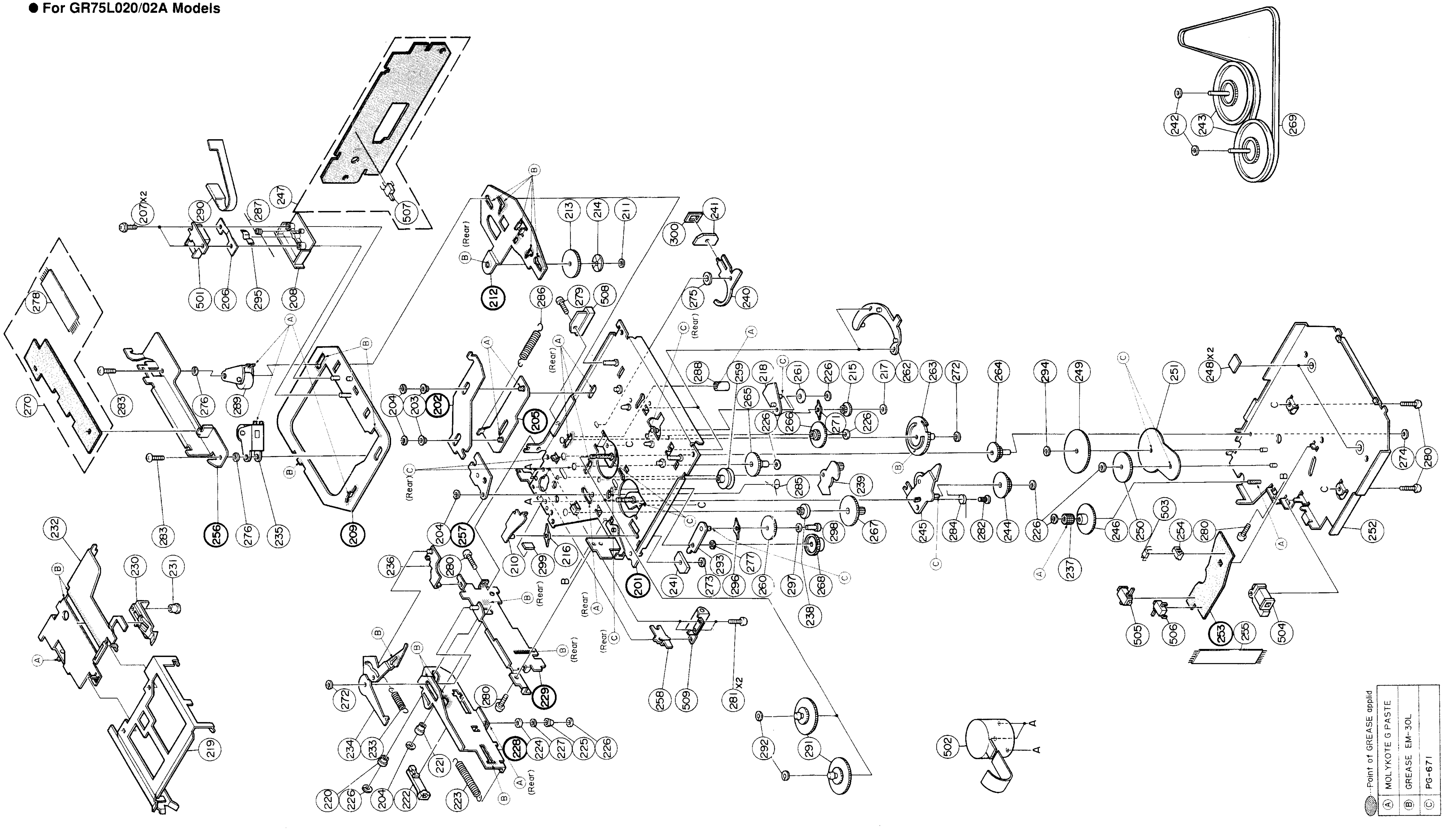
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▨	---Point of GREASE applid
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

A B C D E F G H

Cassette Deck Assembly Parts List (GR75E Series) (2/4)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216	3-E	41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
219	4-B	07B40283W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-E	45A40725W01	Lever, Play Sol
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
247	2-B	01V23700W03	Assy., GR Control P.C. Board
248	3-G	43A41656W01	Spacer, UHMW
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
270	3-A	01V14700W68	Assy., GR Audio P.C. Board
271	3-E	41A30475W01	Spring, Clutch
272	3-F	04B41345P15	Washer, Lock(M1.2)
273	4-D	04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276		04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T25151W01	Head P.C. Board

Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Symbol No.	IN-dex	Part No.	Description
291	4-E	01T35403W02	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	3-D	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid

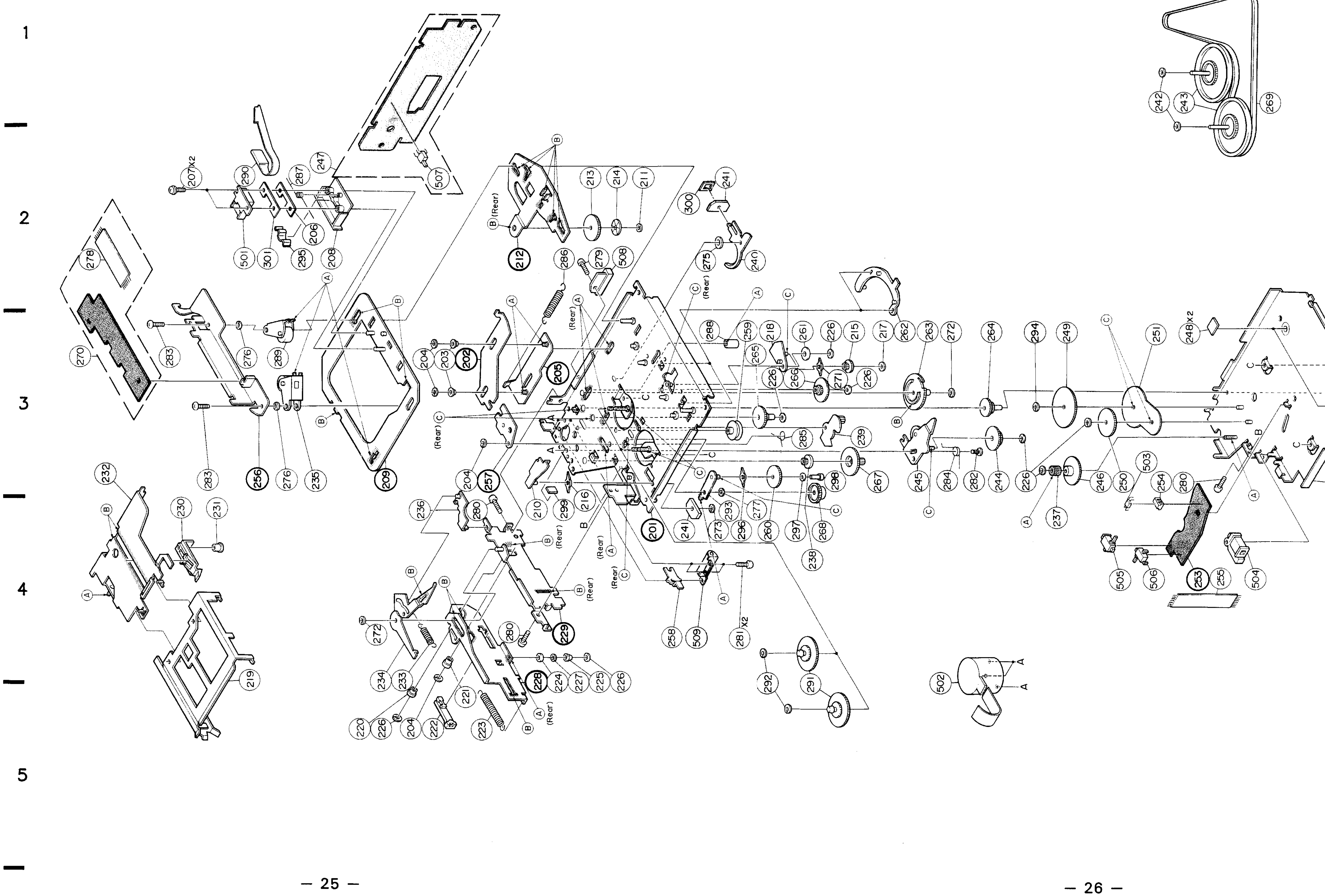
Miscellaneous

Symbol No.	IN-dex	Part No.	Description
501	2-B	88T15971W01	Head
◆ 502	4-E	01V23900W60	Assy., Motor(13.2V-105mA)
○ 502	4-E	01V43400W37	Assy., Motor(13.2V-88mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ◆ ; For GR75L020 model only ○ ; For GR75L02A model only
Others ; Common

Exploded View (GR-Y Series) (3/4)

- For GR75L02Y/52Y Model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	Point of GREASE applid
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR-Y Series) (3/4)

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A31756W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P29	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A30480W01	Gear, Planet
216		41A10097W02	Spring, Clutch
217	3-E	04B41345P35	Washer, Lock(M1.7)
218	3-E	01A30824W01	Assy., Riv Lever Reverse
219	4-B	07B40283W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B30863W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-D	45A40725W01	Lever, Play Sol.
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
☆ 247	2-B	01V23700W03	Assy., GR Control P.C. Board

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
◇ 247		01V44200W74	Assy., GR Control P.C. Board
248	3-G	43A41656W01	Spacer, UHMW
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
270	3-A	01V33300W03	Assy., GR Audio P.C. Board
271	3-E	41A30475W01	Spring, Clutch
272	3-F	04B41345P15	Washer, Lock(M1.2)
273		04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276	3-B	04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F53	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B30863W01	Assy., Pinch Roller
290	2-B	84T35271W01	Head P.C. Board

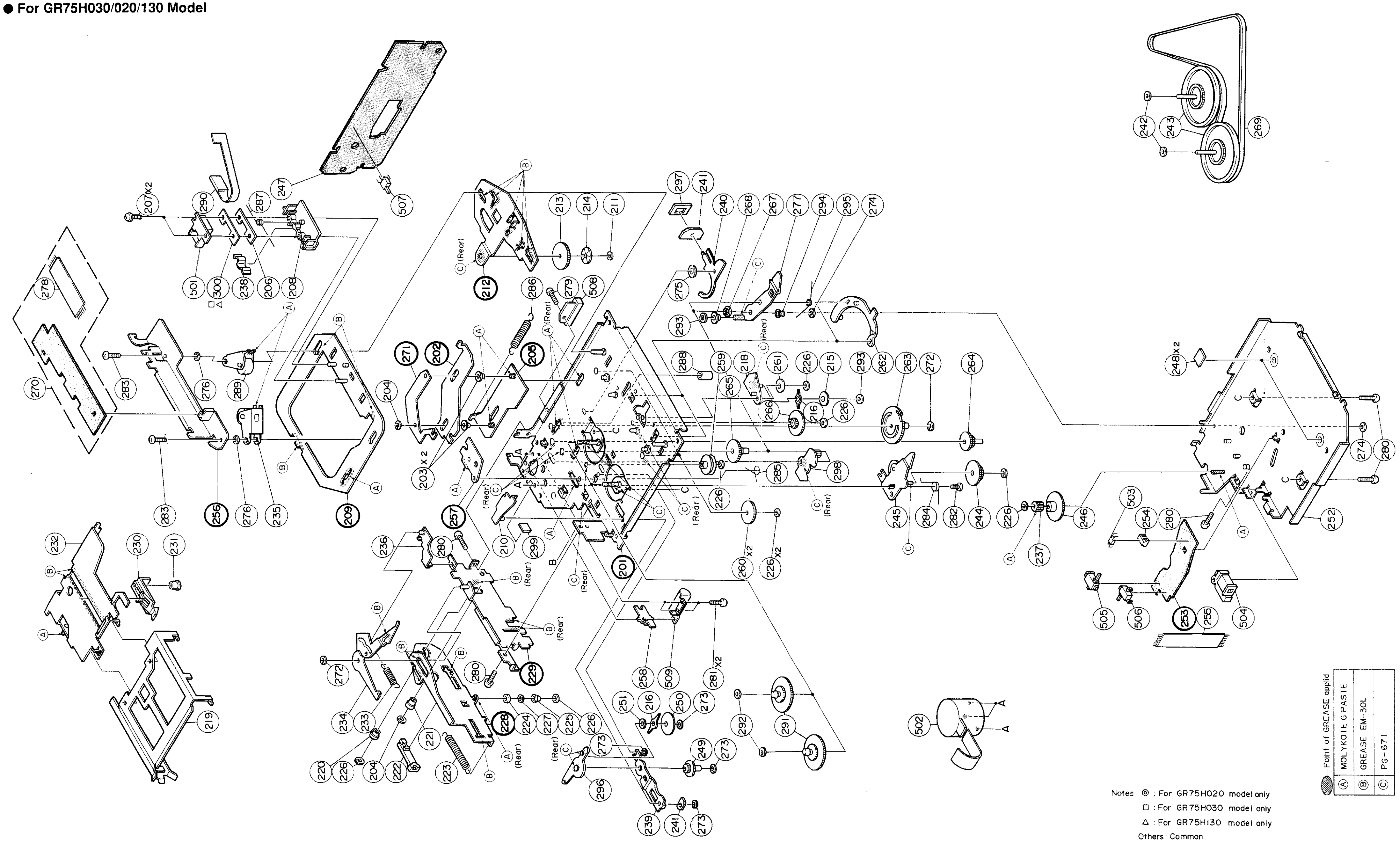
Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

Symbol No.	IN-dex	Part No.	Description
291	4-E	01T35403W02	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
296	4-D	41A40910W01	Spring, Clutch
297	4-E	43A41543W01	Washer, Som(M1.2)
298	3-E	47A41458W01	Pin, Take Up
299	3-C	43A40388W01	Spacer, Polyslider
300	2-D	43A41744W01	Lock, Solenoid
301	2-B	41A41416W01	Spring, Head
Miscellaneous			
501	2-B	88T15971W01	Head
☆ 502	4-E	01V23900W60	Assy., Motor(13.2V-105mA)
◇ 502	4-E	01V44200W73	Assy., Motor(13.2V-80mA)
503	3-G	51T15144W01	Sensor, Photo
504	4-G	01T10371W01	R/F Sol. Assy
505	4-F	40T15382W01	SW., Detector (Pack Down)
506	4-G	40T15382W01	SW., Detector (Metal)
507	2-C	40T15222W01	SW., Detector (Pack In)
508	2-D	01T15249W01	Assy., Play Solenoid
509	4-D	01T10369W02	Assy., Eject Solenoid

Notes:☆ ; For GR75L02Y model only ◇ ; For GR75L52Y model only
Others ; Common

Exploded View (GR75H Series) (4/4)

● **For GR75H030/020/130 Model**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Notes: ◎ : For GR75H020 model only
□ : For GR75H030 model only
△ : For GR75H130 model only
Others: Common

▨ ···Point of GREASE applid	
Ⓐ	MOLYKOTE G PASTE
Ⓑ	GREASE EM-30L
Ⓒ	PG-671

Cassette Deck Assembly Parts List (GR75H Series) (4/4)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A31453W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A31756W01	Spring, Head
	207	2-A	03A38021W01	Screw, Flange(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A30462W01	Assy., Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A30480W01	Gear, Planet
	216		41A30475W01	Spring, Clutch
	218	3-E	01A30824W01	Assy., Riv Lever Reverse
◎	219	4-B	07B40283W01	Holder, Cassette
□	219	4-B	07B40283W01	Holder, Cassette
△	219	4-B	07B40012W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
◎	223	5-C	41B10386W03	Spring, GR(Rack)
□	223	5-C	41B10386W03	Spring, GR(Rack)
△	223	5-C	41B10386W04	Spring, GR(Rack)
	224	5-C	43A10121W01	Roller, Eject A
	225	5-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	5-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
◎	232	4-A	01A10212W01	Assy., Riv Plate Base
□	232	4-A	01A10212W01	Assy., Riv Plate Base
△	232	4-A	01A40024W01	Assy., Riv Plate Base
◎	233	5-C	41B10386W01	Spring, Eject Arm
□	233	5-C	41B10386W01	Spring, Eject Arm
△	233	5-C	41B63283F11	Spring
◎	234	5-C	01A30883W01	Assy., Riv Eject Arm B
□	234	5-C	01A30883W01	Assy., Riv Eject Arm B
△	234	5-C	01A40021W01	Assy., Riv Eject Arm D
	235	3-B	01B30863W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A20314W01	Pinion, Eject
	238	2-B	26A20537W01	Shield, plate
	239	5-D	01A40881W01	Assy., Riv RF Link
	240	2-D	45A40725W01	Lever, Play Sol.
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer, Polyslider(M2.1)
	243	1-G	01A30488W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch A
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V33500W45	Assy., GR Control P.C. Board
	248	3-G	43A41656W01	Spacer, UHMW
	249	5-D	44A30481W01	Gear, RF Idler
	250	4-D	44A30483W01	Gear, RF
	251	4-D	04S40075G58	Washer, Polyslider(M2.1)
	252	3-H	01A30463W01	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A30476W01	Pulley, Idler
	260	4-E	44A30482W01	Gear, Take Up
	261	3-E	44A30478W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B30484W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-E	44A30486W01	Gear, Pause Idler B
	266	3-E	44A30479W01	Gear, Reverse Idler
	267	2-E	44A30485W01	Gear, Motor Idler
	268	2-E	44A30487W01	Gear, Motor Clutch
	269	1-G	42A31850W01	Belt, GR
◎	270	3-A	01V43400W38	Assy., GR Audio P.C. Board
□	270	3-A	01V33300W03	Assy., GR Audio P.C. Board
△	270	3-A	01V33300W03	Assy., GR Audio P.C. Board
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273		04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	2-E	01A30464W01	Assy., Riv Play Clutch
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F53	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch(M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B30863W01	Assy., Pinch Roller
◎	290	2-B	84T25151W01	Head P.C. Board

Notes:◎ ; For GR75H020 model only　□ ; For GR75H030 model only
△ ; For GR75H130 model only　Others ; Common

Symbol No.		IN-dex	Part No.	Description
□	290	2-B	84T35271W01	Head P.C. Board
△	290	2-B	84T35271W01	Head P.C. Board
	291	5-E	01T35403W01	Assy., Reel
	292	5-E	04B41345P12	Washer, Lock(M1.7)
	293	2-D	04B41345P35	Washer, Lock(M1.7)
	294	2-E	43A30827W01	Spacer, Motor Idler
	295	2-E	41A30490W01	Spring, Play Clutch
	296	5-D	01A40882W01	Assy., Riv Lever RF
	297	2-D	34A48030W01	Washer, Solenoid
	298	3-E	01A10201W02	Assy, Riv Lever Pause
	299	4-C	43A40388W01	Spacer, Polyslider
□	300	2-B	41A41416W01	Spring, Head
△	300	2-B	41A41416W01	Spring, Head
Miscellaneous				
◎	501	2-B	88T15971W01	Head
□	501	2-B	88T35406W01	Head
△	501	2-B	88T35406W01	Head
	502	5-F	01V41100W72	Assy., Motor(11.5v-85mA)
	503	3-C	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

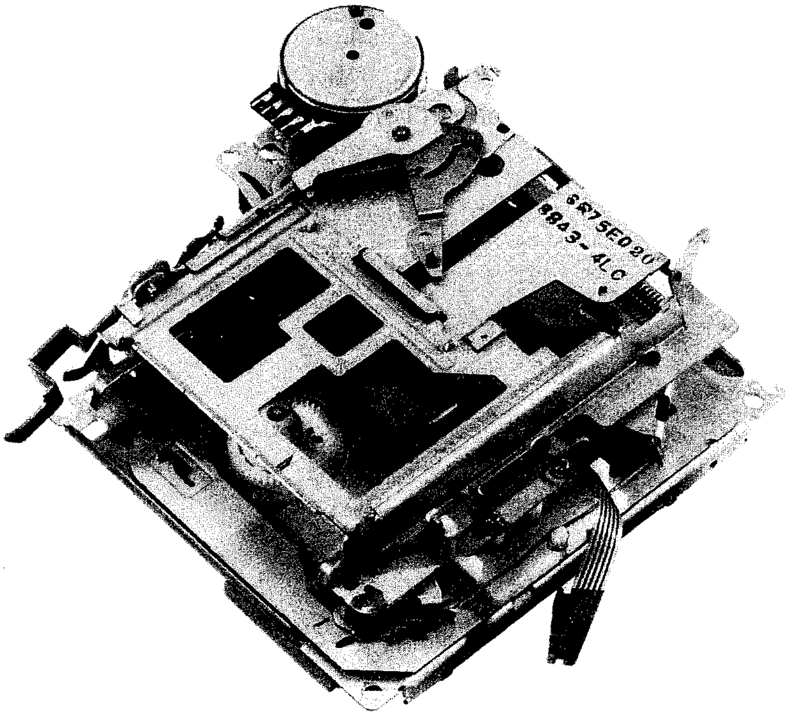
Notes:◎ ; For GR75H020 model only □ ; For GR75H030 model only
△ ; For GR75H130 model only Others ; Common

YM 206

ALPINE SERVICE MANUAL

Cassette Deck Mechanism

ADDENDUM & REVISED (III)


6R75E020
8843-4LC

GR/GR-Y SERIES

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List of Usable Lock Washers

	SIZE	PARTS NO.	QUANTITY		
			GR75E Series	GR75L Series	GR-Y Series
1	(M1.2 × 3.5 × 0.25)	04B41345P01	8	7	6
2	(M1.7 × 3.5 × 0.25)	04B41345P02	1	1	2
3	(M2.1 × 5 × 0.25)	04B41345P06	1	1	0
4	(M1.2 × 2.5 × 0.25)	04B41345P11	7	7	8
5	(M1.7 × 3.5 × 0.35)	04B41345P12	2	2	2
6	(M1.2 × 3.5 × 0.35)	04B41345P15	1	1	1
7	(M1 × 2.5 × 0.25)	04B41345P17	1	1	1
8	(M2.6 × 5 × 0.25)	04B41345P29	1	1	0
9	(M3.1 × 8 × 0.05)	04B41345P30	1	1	1
10	(M1.7 × 3 × 0.25)	04B41345P31	1	1	1
11	(M3.1 × 5 × 0.35)	04B41345P32	2	2	2
12	(M1.2 × 2.5 × 0.3)	04B41345P34	1	1	0
13	(M2.1 × 4 × 0.25)	04B41345P37	0	0	1
14	(M2.6 × 4.7 × 0.25)	04B41345P38	0	0	1

List of Usable Oil

1) Molykote E paste
2) Grease EM-30L
3) Grease FLOIL 425A

List of Usable Jigs

1) GR bottom gear jig (Part No. 44A20788W01)
2) Head height adjustment gauge
   AI-500 (Part No. AI-500)

Memo

Disassembly, Assembly and Replacement of Functional Parts

1. Disassembly and Assembly of Bottom Cover

(1) Turn the mechanism around as shown in Figure 1.
(2) Remove M1 lock washer ① as shown in Figure 1.
(3) Remove three screws ② as shown in Figure 1.
(4) Lift the bottom cover slowly from the position Ⓐ-1, pull the hooks out of the holes in the chassis, and remove the bottom cover as shown in Figure 1.
(5) When remounting the bottom cover, first turn the front of the mechanism up as shown in Figure 2.
(6) Slide the slider in the direction Ⓐ-2 as shown in Figure 2.
(7) Push down the cassette holder in the direction Ⓐ-3 as shown in Figure 2.
(8) Pull the door pin in the direction Ⓐ-4 so that the mechanism is locked in as shown in Figure 2.
(9) Turn the mechanism around as shown in Figure 3.
(10) Pull the automatic metal lever in the direction Ⓐ-5 and the RF solenoid chip in the direction Ⓐ-6 as shown in Figure 3.
(11) Insert the hooks of the bottom cover into the chassis in the direction Ⓐ-7, and then join the part Ⓐ-8 of the bottom cover to the chassis slowly, making sure that the 3 points indicated with the straight lines in the Figure 3 are fitted properly.
If there are troubles in mounting the bottom cover, do not apply force but remove the bottom cover once again and check the positions of the individual parts. (Refer to Figure 3.)
(12) Since the hooks marked Ⓐ-8 will be lifted slightly as shown in Figure 4, insert the jig through the hole Ⓐ-9, and fix it turning the jig slightly in the direction Ⓐ-11.
Instead of operation (12), turn the gear nose slowly with a precision screwdriver etc., taking care not to damage it.
After 2 to 3 turns, it will click into place.
(Refer to Figures 4 and 5.)
(13) Fix the screws and the lock washer that have been removed.

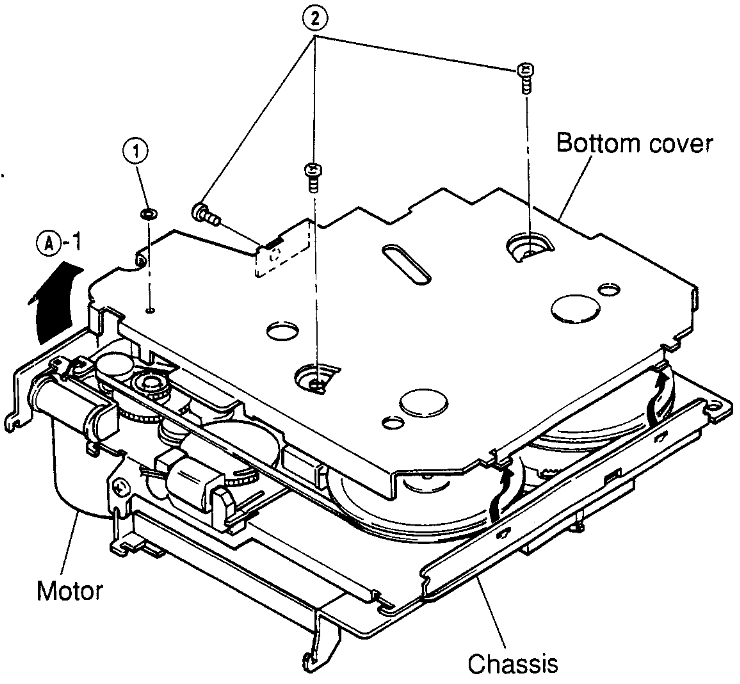


Figure 1

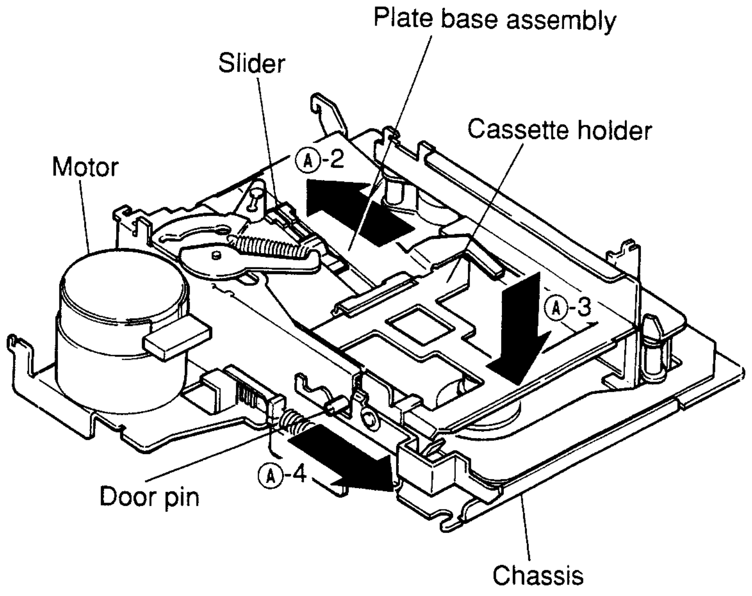


Figure 2

(14) Insert the jig into the hole Ⓐ-9 as shown in Figure and rotate the eject solenoid counterclockwise about 20 times, pulling it in the direction Ⓐ-10 with the finger.
Then the eject operation is completed.
Instead of operation (14), the eject operation can be performed by mounting the mechanism to the product. (Refer to Figures 4 and 5.)

Note: Do not reuse the used lock washers for mounting.
When turning the mechanism, be careful not to drop the gear and the flywheel.
Fasten the three screws with a fastening torque of 6 kg.cm.

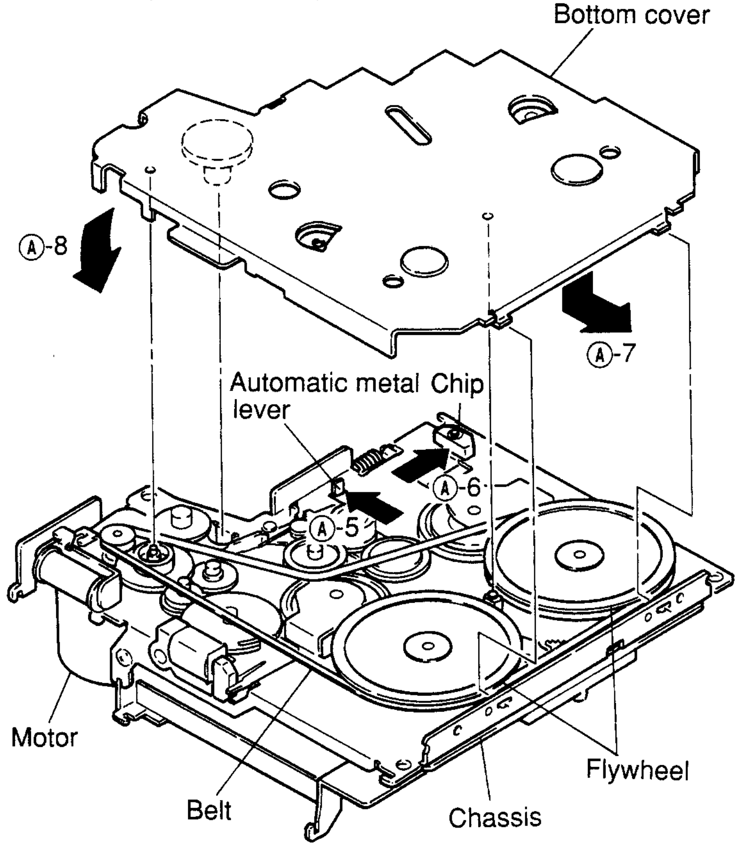


Figure 3

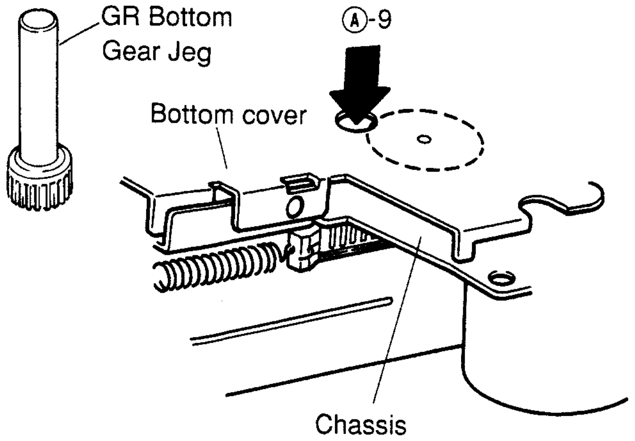


Figure 4

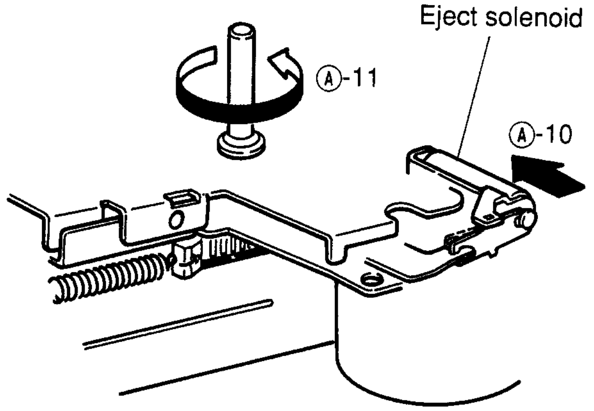


Figure 5

2. Replacement of the bottom cover mounting parts

a. Replacement of the eject gear

(1) Remove M1.2 lock washer ③ as shown in Figure 6.
(2) Pull the eject pinion out of the eject gear and remove the eject gear as shown in Figure 6.
(3) Apply the molykote E paste to the section Ⓑ-1, and mount the eject gear following the removal steps in the reverse order. After replacement is finished, make sure that the gear rotates smoothly. (Refer to Figure 6.)

Note: Do not reuse the used lock washers for remounting.
Take care to avoid damage by piercing and tearing.

b. Replacement of the RF solenoid

(1) Remove two solders ④ and remove the RF solenoid from the bottom cover by pulling it up as shown in Figure 6.
(2) Replace the solenoid with a new one, and remount it following the removal steps in the reverse order as shown in Figure 6.

Note: When removing solder ④, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged.

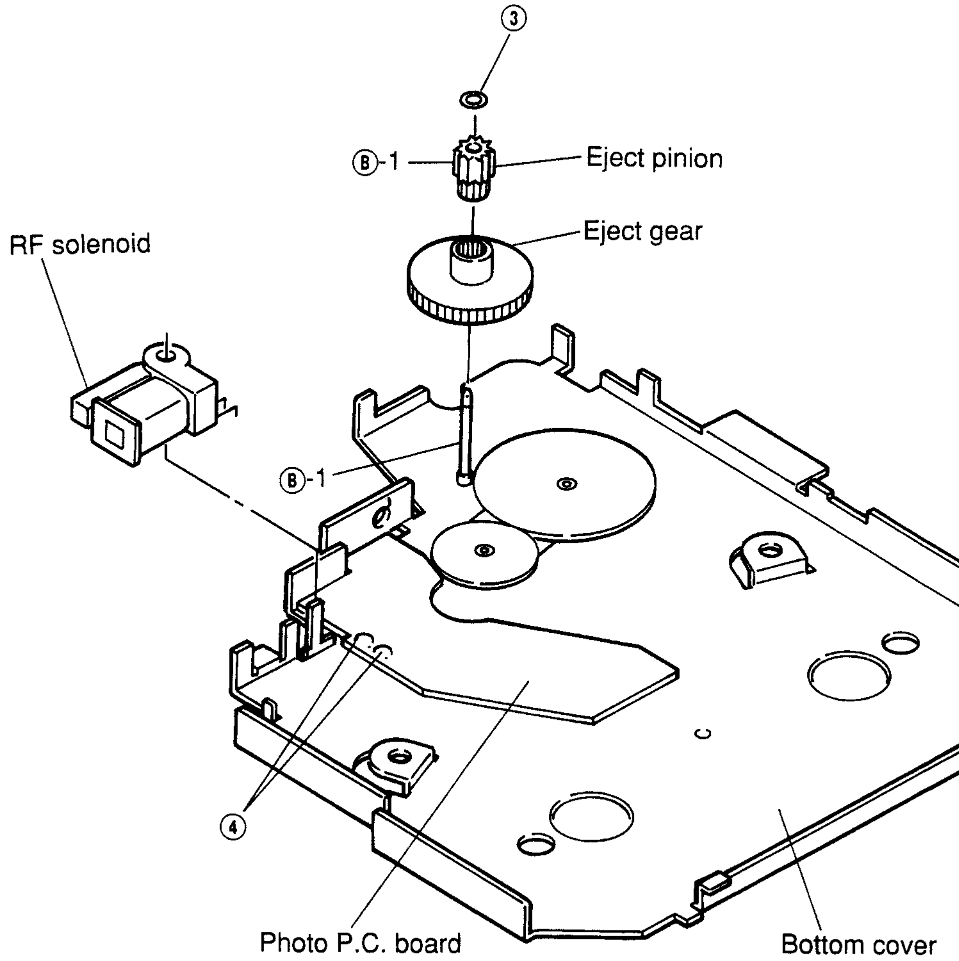


Figure 6

c. Replacement of the photo sensor

(1) Remove four solders ⑤ as shown in Figure 7.
(2) Remove the photo guide together with the photo sensor from the photo P.C. board as shown in Figure 7.
(3) Insert the new photo sensor into the photo guide, and bend the legs of the photo sensor in the direction marked Ⓑ-2 as shown in Figure 7.
(4) Insert the photo guide into the P.C. board and solder the legs so that the photo sensor is set as indicated by ⬚ in Figure 7.

Note: When using the soldering iron, set the temperature of the soldering iron to 350° ± 10° and the soldering time to 1 – 3 seconds. Take care that the solder is not loose, that there is no shortcircuit and that the coating is not damaged. Also take care that the photo guide is properly fixed and straight.

d. Replacement of the detector switch (Automatic metal pack-in)

(1) Remove 4 solders ⑥ with which the switch is fixed as shown in Figure 7.
(2) Prepare the terminals of the switch of the new solder as shown in Figure 8.
(3) After that, insert the switch into the photo P.C. board, and solder the terminals.

Note: When using the soldering iron, refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Also take care that the switch guide is properly fixed and straight.

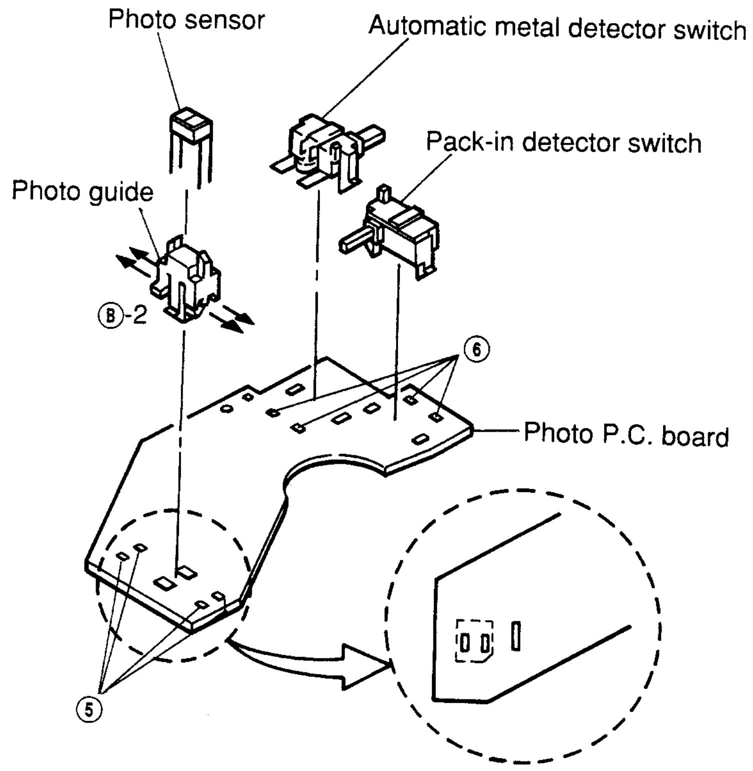


Figure 7

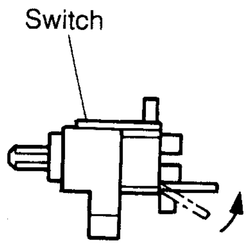


Figure 8

3. Replacement of the mounting parts on the rear of the main chassis

a. Replacement of the belt
(1) After removing the bottom cover, remove the belt.
(2) Clean the new belt with absolute alcohol, and fix it as shown in Figure 9.

Note: When fixing the belt, make sure that it is not twisted or dirty. When removing the belt, do not turn up the front of the chassis.

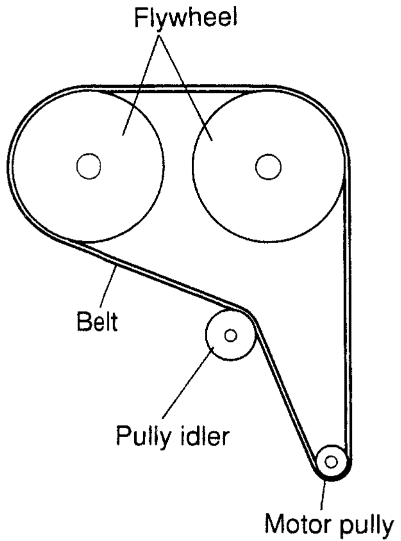

Flywheel
Belt
Pully idler
Motor pully

Figure 9

b. Replacement of the motor
(1) After removing the belt, remove spring ⑦ as shown in Figure 10.
(2) Remove solder ⑧-1, and remove the parallel wire (5P) from the control P.C. board as shown in Figure 11.
(3) Remove two screws ⑨ and ⑩, and remove the motor, taking care not to damage the motor idler gear. (Refer to Figure 10.)
(4) Mount the new motor following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Since the parallel wire is very easily damaged, handle it with care.
Fasten the two screws with a fastening torque of 3 kg.cm.

*When inserting the clutch spring, be careful of the inserting direction as shown in the Figure.

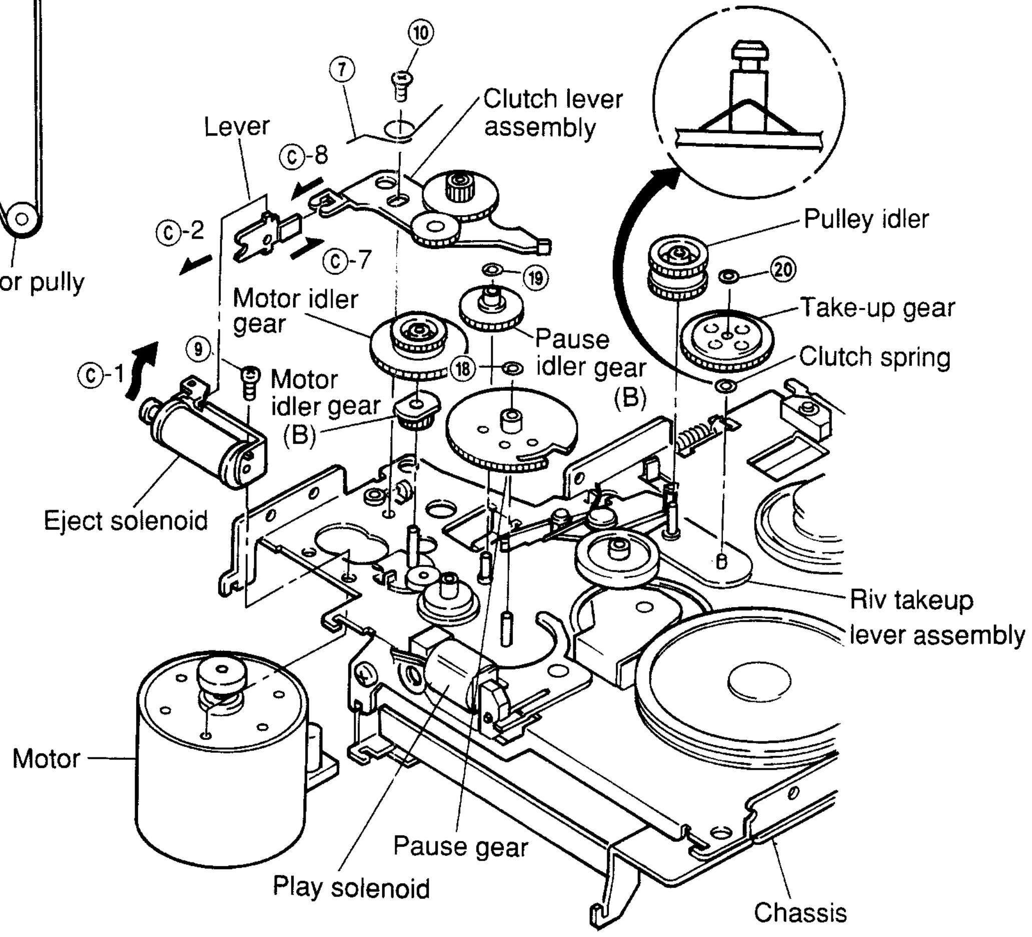
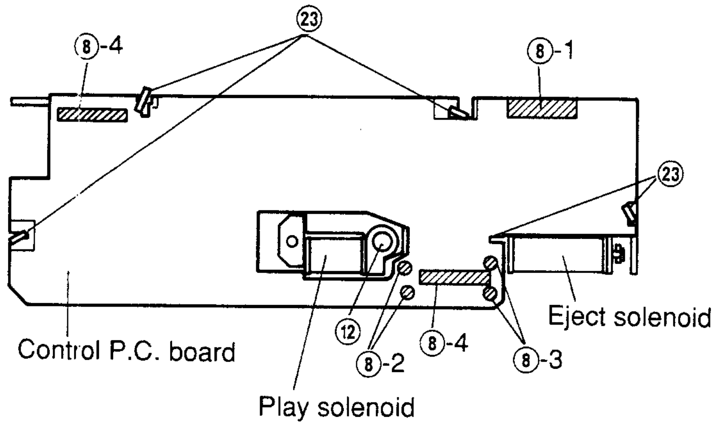

⑩
⑦
Clutch lever assembly
Lever
Ⓒ-8
Ⓒ-2
Ⓒ-7
Pulley idler
⑳
⑲
Take-up gear
Clutch spring
Motor idler gear
⑨
Ⓒ-1
Motor idler gear (B)
⑱
Pause idler gear (B)
Eject solenoid
Riv takeup lever assembly
Motor
Pause gear
Play solenoid
Chassis

Figure 10

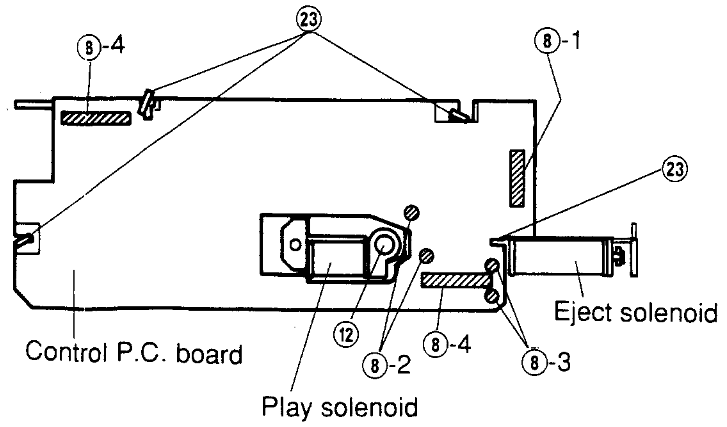
c. Replacement of the flywheels
(1) After removing the belt, pull out the two flywheels. Take care not to loose the polyslider washer ⑪ located between the flywheel and the chassis. (Refer to Figure 12.)
(2) Fix the polyslider washer to the new flywheel and mount the flywheel to the chassis.

d. Replacement of the play solenoid
(1) Remove the two solders ⑧-2 as shown in Figure 11.
(2) Remove one screw ⑫ and remove the solenoid as shown in Figure 11.
(3) Mount the new solenoid following the removal steps in the reverse order.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 2.3 kg.cm.


㉓
⑧-4
⑧-1
㉓
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Eject solenoid
Play solenoid

[For GR75E020, GR75E010, GR75E01A, GR75E01C models]


㉓
⑧-4
⑧-1
㉓
Control P.C. board
⑫
⑧-2
⑧-4
⑧-3
Eject solenoid
Play solenoid

[For GR75L020, GR75L010 models]

Figure 11

e. Replacement of the eject solenoid
(1) Remove two solders ⑧-3. Take care not to loose the tube that protects the wire. (Refer to Figure 11.)
(2) Remove screw ⑨ and remove the play solenoid as shown in Figure 10.
(3) Align position Ⓒ-1 of the new solenoid with position Ⓒ-2 of the lever and fasten the screw as shown in Figure 10.
(4) Lead the wire through the tube and solder it.

Note: Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Fasten the screws with a fastening torque of 3 kg.cm. As the solder wires are not insulated, do not let them cross each other.

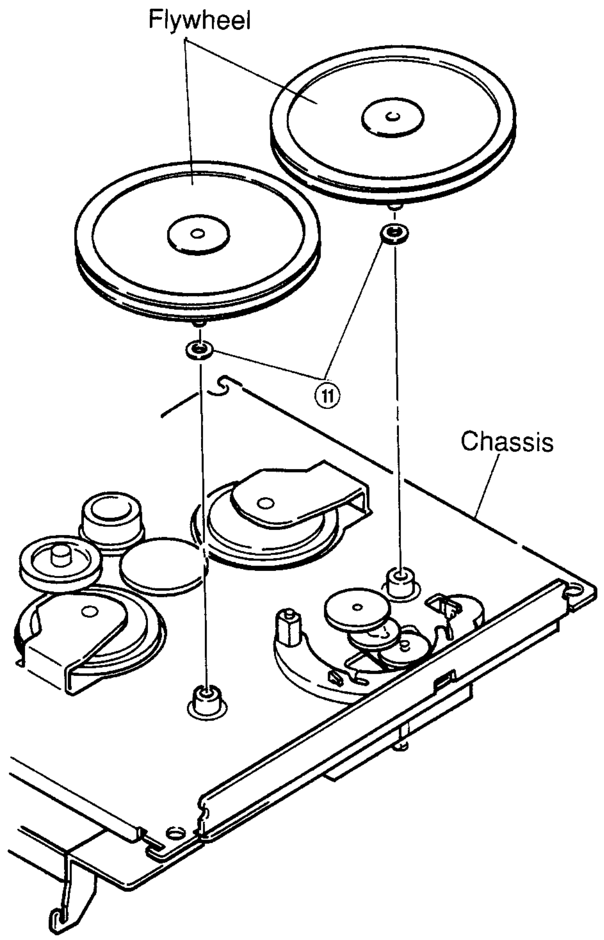

Flywheel
⑪
Chassis

Figure 12

f. Replacement of gears

(f-1) Replacement of the reverse idler gear

(1) Remove M1.2 lock washer ⑬, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.

(2) Remount following the removal steps in the reverse order.

(f-2) Replacement of the sun gear

(1) Remove M1.2 lock washer ⑭, pull it up from the stud of the chassis and remove the gear as shown in Figure 13.

(2) Mount it, following the removal steps in the reverse order.

(f-3) Replacement of the fixing gear

(1) Adjust the two mounting claws for the fix gear on the chassis ⑮ and remove the section ⓒ-3 of the gear by pulling it up in the direction of the arrow shown in Figure 13.

(2) Insert the section ⓒ-4 of the new gear into the chassis, and mount it following the removal steps in the reverse order as shown in Figure 13.

(f-4) Replacement of the reverse lever assembly and planet gear

(1) Remove both the fixing gear and the sun gear and remove the reverse lever assembly as shown in Figure 13.

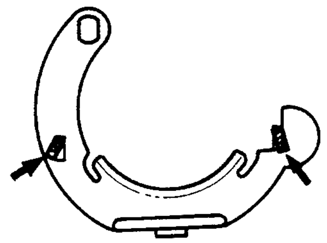
(2) Remove M1.7 lock washer ⑯ and remove the planet gear as shown in Figure 14.

(3) Mount the new planet gear and reverse lever following the removal steps in the reverse order.

Notes on f-1 through f-4:

After mounting all parts, check if the reverse lever moves in the directions marked ⓒ-5 when the reverse gear is turned clockwise and counterclockwise.

*After mounting the fixing gear, bend the claws ⑮ into the form of as shown in the Figure.



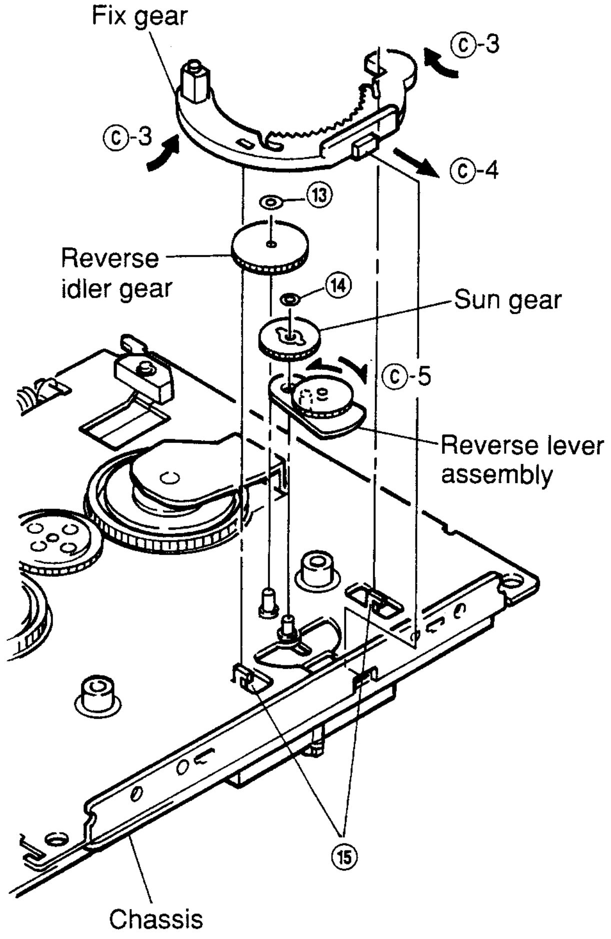


Figure 13

(f-5) Replacement of the clutch lever assembly and eject idler gear

(1) After removing the motor, remove the motor idler gear and the motor idler gear (B) and remove the clutch lever assembly as shown in Figure 10.

(2) Remove M1.2 lock washer ⑰ and remove the eject idler gear as shown in Figure 15.

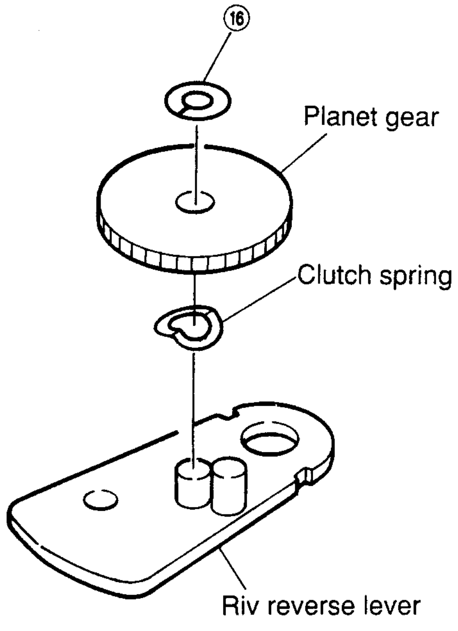
(3) Mount the new gears and clutch lever following the removal steps in the reverse order.

Note: When mounting the gears to the lever, apply grease (FLOIL 425A) to the position ⓒ-6 as shown in Figure 15. Align the position ⓒ-7 with the position ⓒ-8 and mount the clutch lever as shown in Figures 10 and 15.

(f-6) Replacement of the pause gear

(1) Remove M1.2 lock washer ⑱ and remove the pause gear pulling it up from the stud of the chassis as shown in Figure 10.

(2) Mount the new gear following the removal steps in the reverse order.



[Disassembly Reverse Lever Assembly]

Figure 14

(f-7) Replacement of the pause idler gear (B)

(1) After removing the motor and the motor idler gear, remove M1.2 lock washer ⑲ and remove the gear by pulling it up from the stud of the chassis as shown in Figure 10.

(2) Mount the new gear by following the removal steps in the reverse order.

(f-8) Replacement of the take-up gear

(1) After removing the belt and the pulley idler gear, remove M1.2 lock washer ⑳ by pulling it up from the stud of the riv take-up lever assembly as shown in Figure 10.

(2) Remount the take-up gear following the removal steps in the reverse order.

Notes on f:

Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

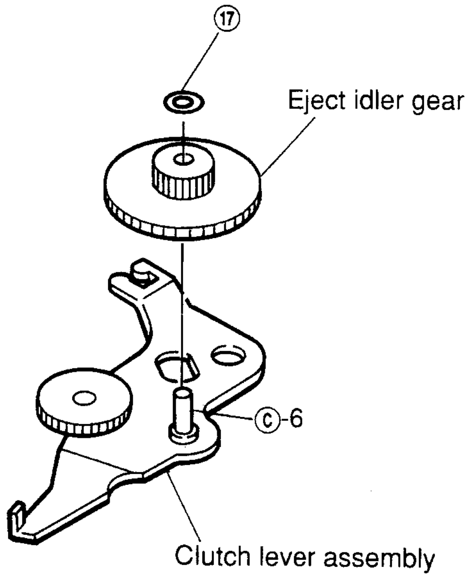


Figure 15

4. Replacement of the parts mounted on the front of the chassis

a. Replacement of the audio P.C. board

(1) Remove two solders ㉑ and remove the parallel wire (7P) and the head P.C. board as shown in Figure 16.

(2) Adjust the two claws ㉒ to the rectangular holes on the P.C. board and remove the P.C. board as shown in Figure 16.

(3) After replacement, mount the new P.C. board following the removal steps in the reverse order.

Note: The head P.C. board and the parallel wire are easily damaged. Handle them with care. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board.

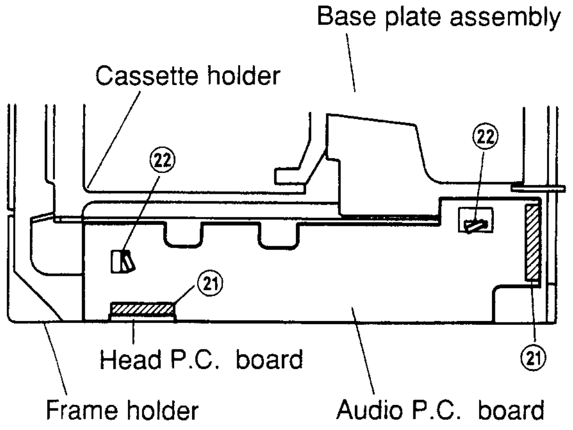


Figure 16

b. Replacement of the control P.C. board

(1) Remove seven solders ⑧ and remove the three parallel wires and the wires of the eject solenoid and of the play solenoid as shown in Figure 11.

(2) Remove five claws ㉓ and remove the P.C. board as shown in Figure 11. [For GR75E020, GR75E010, GR75E01A, GR75E01C models]
Remove four claws ㉓ and remove the P.C. board as shown in Figure 11.
[For GR75L020, GR75L010 models]

(3) After replacing the old P.C. board with a new one, mount it following the removal steps in the reverse order.

Note: As mentioned in Item 4-a, handle the parallel wires carefully, and be sure that the temperature of the soldering iron and the soldering time are proper. As the wires of the eject solenoid are not insulated, do not let them cross each other.

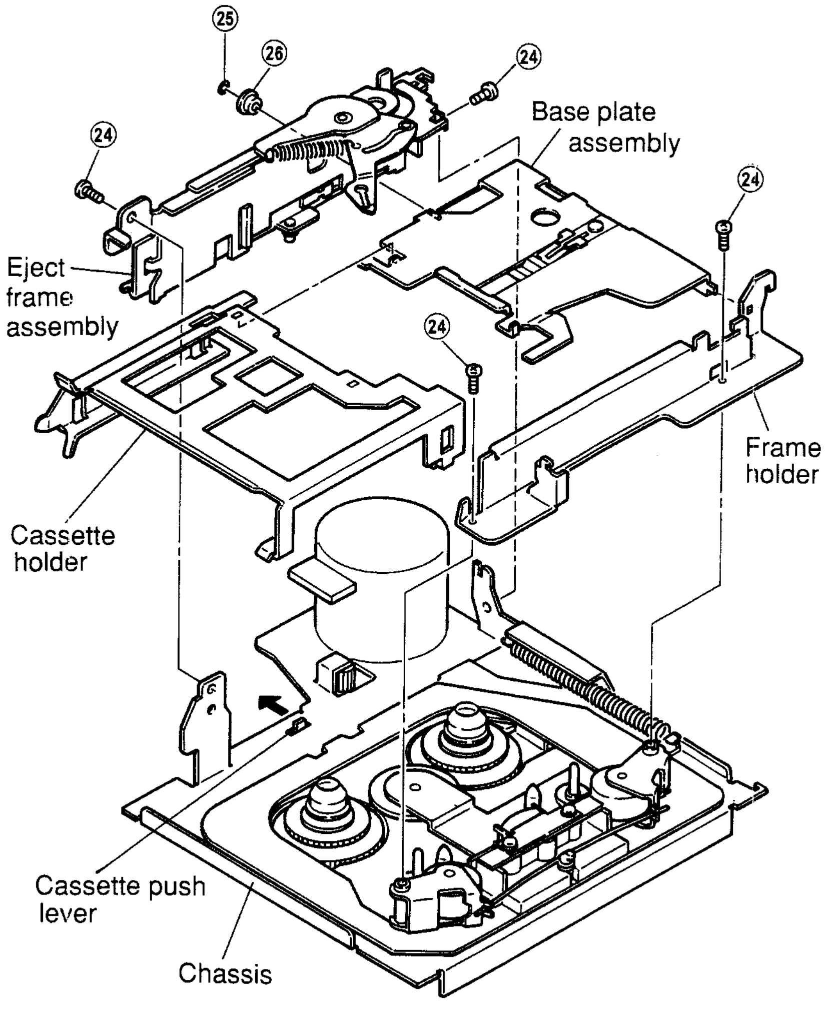


Figure 17

c. Disassembly and assembly of the cassette holder

(1) Remove four screws ㉔ and remove the eject frame assembly and the frame holder as shown in Figure 17.

(2) Remove M1.2 lock washer ㉕ and plate base roller ㉖ and remove the cassette holder and the base plate assembly as shown in Figure 17.

(3) Remount them following the removal steps in the reverse order.

Notes: 1. When mounting the cassette holder and the base plate, insert the slider shaft into the eject arm and fix them turning the slider shaft in the direction indicated by the arrow in the figure. Make sure that the cassette holder and the base plate are in the cassette-in mode during this operation. (Refer to Figure 18).

2. When mounting the eject frame assembly, push the cassette push lever in the direction indicated by the arrow in the Figure 17.

3. When mounting the base plate assembly and the eject frame assembly, or when mounting the eject frame assembly to the chassis, do not apply excessive force to avoid deformations of the eject arm and the frame.

4. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

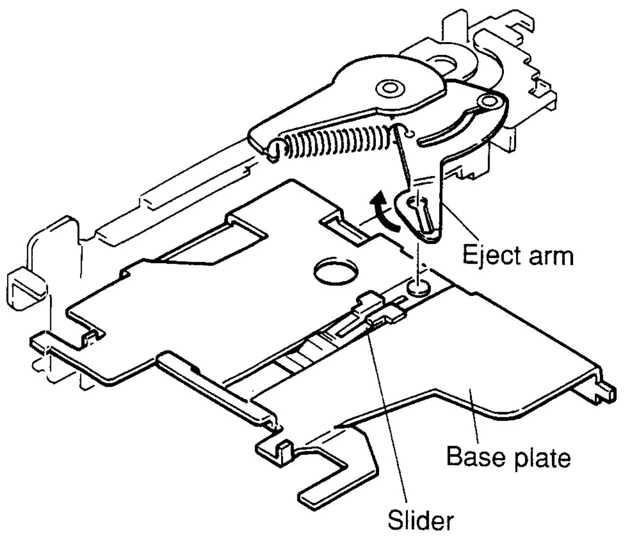


Figure 18

d. Replacement of the reels

(1) Remove M1.7 two lock washers ㉖ (Refer to figure 19).

(2) Move the select lever in the direction marked Ⓓ-1 in the Figure and remove the reel by gripping the reel gear as shown in Figure 19.

(3) After replacement, mount the new reels following the removal steps in the reverse order.

(4) After mounting, check the tape speed and the wow and flutter with test tape MTT-111.

Note: Since the reel is easily loosened if the cap is gripped, always handle it gripping the gear. Do not reuse the used washers. Take care to avoid damage by piercing and tearing.

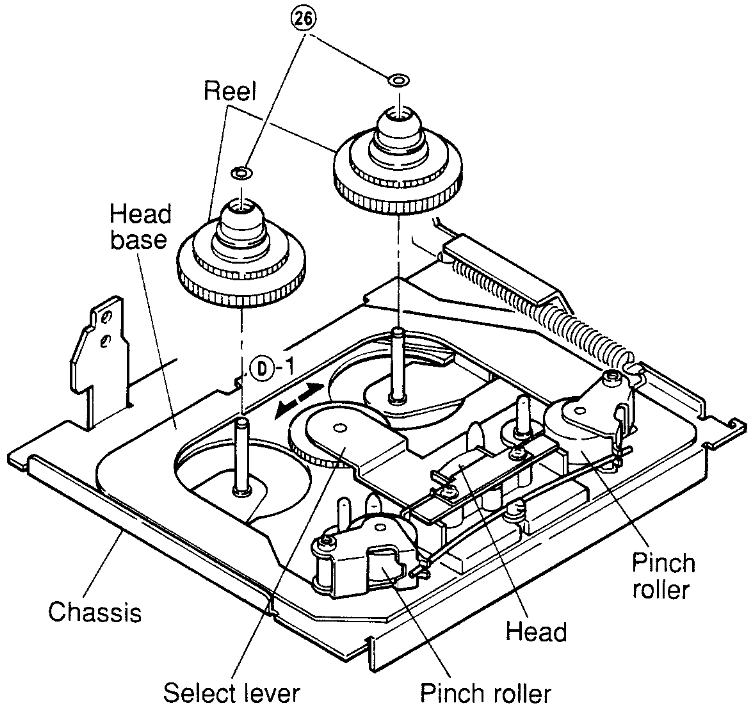


Figure 19

Supl

e. Replacement of the pinch rollers

(1) Remove pinch roller spring ㉗ as shown in Figure 20.

(2) Remove M3.1 two lock washers ㉘ and remove the pinch roller as shown in Figure 20.

(3) Mount the pinch rollers following the removal steps in the reverse order.
Apply insulation coating to the position Ⓓ-2 of the pinch roller as shown in Figure 20.

Note: Make sure that the pinch rollers are thoroughly fixed and that they are not deformed. Do not reuse used lock washers. Take care to avoid damage by piercing and tearing.

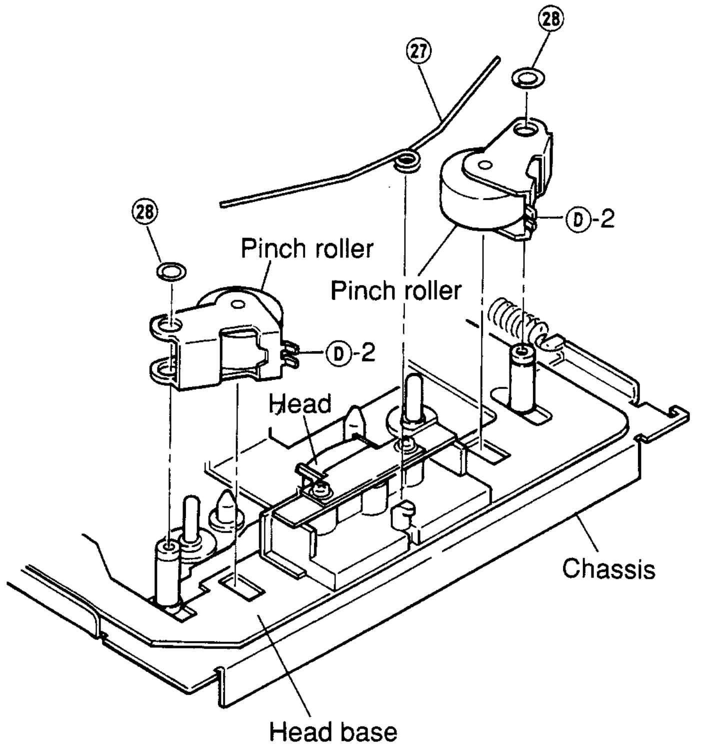

㉘
㉗
㉘
Pinch roller
Pinch roller
Ⓓ-2
Ⓓ-2
Head
Chassis
Head base

Figure 20

f. Replacement of the head

(1) After removing the pinch roller spring, remove two screws ㉙ as shown in Figure 21.

(2) Remove solder ㉚ and remove the head from the head P.C. board as shown in Figure 22.

(3) After replacement, mount the new head following the removal steps in the reverse order.

Notes: 1. Refer to Item 2-C to make sure that the temperature of the soldering iron and the soldering time are proper. Do not bring the soldering iron near the head P.C. board. Make sure that the head P.C. board is not lifted.

2. Fasten the two screws with a fastening torque of 2.3 kg.cm. Note that the tension of the head spring can be decreased if the screws are fastened too strongly.

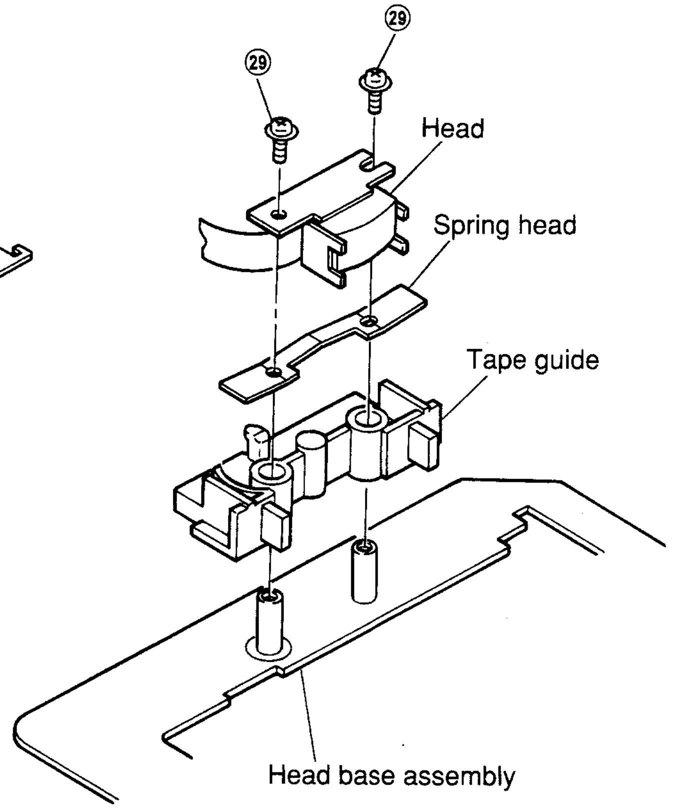

㉙
㉙
Head
Spring head
Tape guide
Head base assembly

Figure 21

(4) Adjust the height of the head as shown in Figures 23, 24 and 25.

① Place the height adjustment gauge (AI-500) on the head base, and adjust the height so that the check bar fits in the tape head guide smoothly.

② When the check bar touches the top (or bottom) of the tape guide, insert a spacer (t 0.1 mm or polislider washer t 0.13 mm).
If necessary, remove the spacer.

Note: If you do not have a height gauge like described in (4)-①, run the tape at normal speed and adjust the height of the head and the tape head guide so that the tape does not curl.

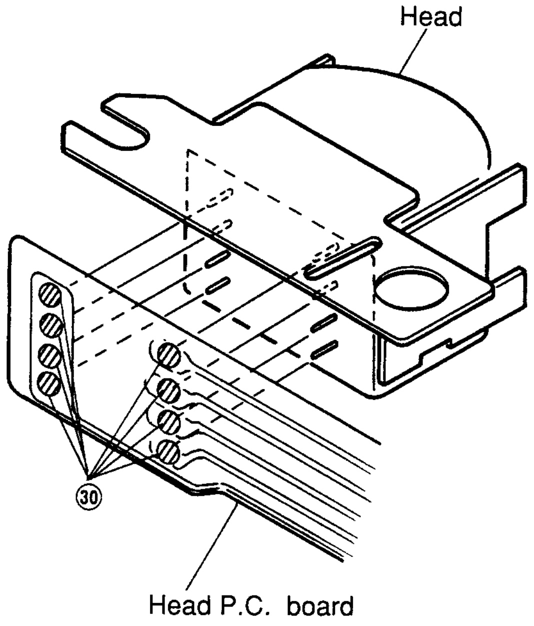

Head
㉚
Head P.C. board

Figure 22

(5) After having assembled the complete mechanism, adjust the angle of the head with test tape MTT-113C. (Refer to chapter "Adjustment of the head angle".) After the adjustment, apply the screw lock and fix the screws.

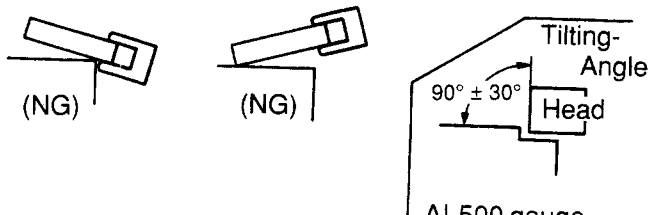

(NG)
(NG)
Tilting-Angle
90° ± 30°
Head
AI-500 gauge

Figure 23

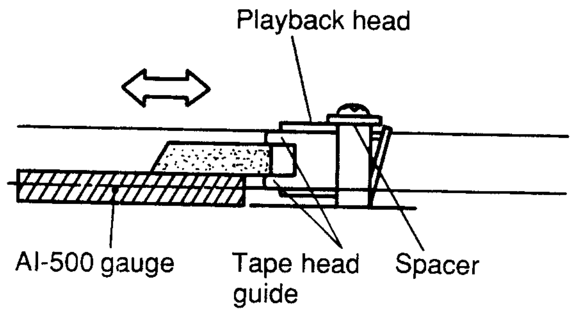
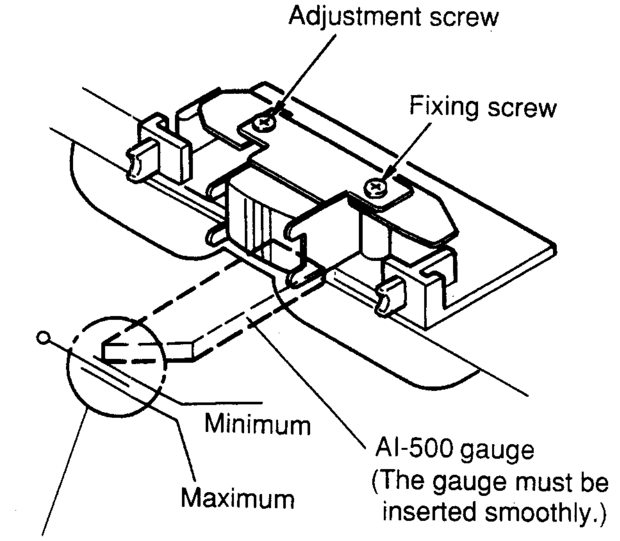

Playback head
AI-500 gauge
Tape head guide
Spacer

Figure 24

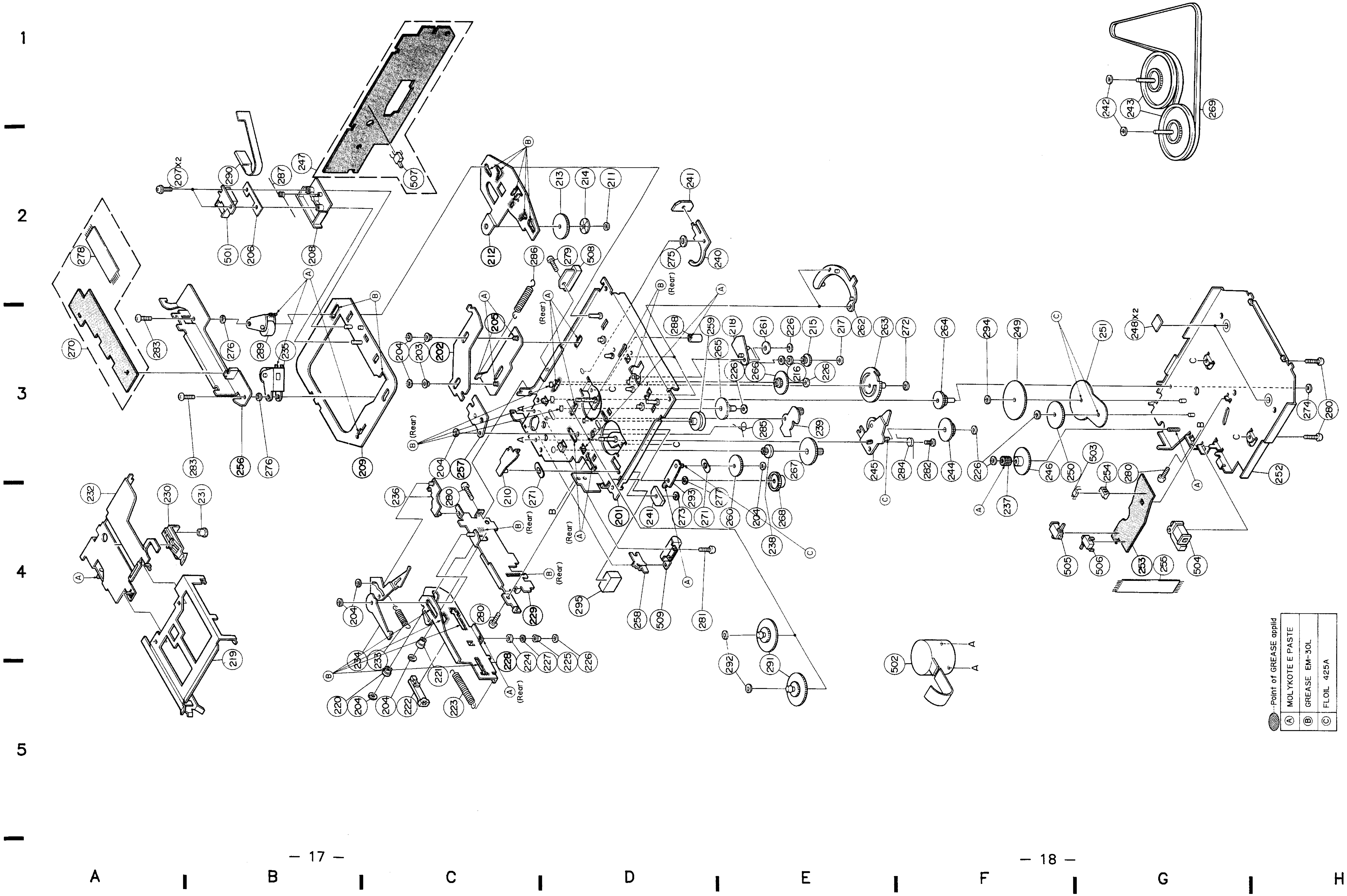

Adjustment screw
Fixing screw
Minimum
Maximum
AI-500 gauge
(The gauge must be inserted smoothly.)

The nosepiece of the gauge must be between the minimum and maximum positions.

Figure 25

Exploded View (1/3)

- **For GR75E010/01A/01C/020 Models**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(Rear)
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248x2
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220
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239
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282
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226
237
246
250
503
254
280
252
274
280
(Rear)
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204
210
271
201
241
273
293
271
277
260
204
267
268
238
232
230
231
236
280
(Rear)
(Rear)
(Rear)
229
295
258
509
281
505
506
253
255
504
219
204
280
234
233
221
228
224
227
225
226
220
204
204
222
223
(Rear)
292
291
502
A
B
C

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Ⓑ	GREASE EM-30L	
Ⓒ	FLOIL 425A	

Cassette Deck Assembly Parts List (1/3)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roller, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A10095W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy.,Riv Lever R/F Sol
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A10142W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P35	Washer, Lock(M1.7)
	218	3-E	01A21853W01	Assy., Riv Lever Reverse
	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A63281F01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject A
	225	4-D	43A10360W01	Roller, Eject B
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject C
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy.,Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A10148W01	Assy., Riv Eject Arm A
	235	3-B	01B10381W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever Pack In SW
	237	4-F	44A12975W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A10092W01	Lever, Play
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer Polyslider (M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W01	Gear, Eject Idler
	245	3-E	01A10205W01	Assy., Riv Lever Clutch A
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V11500W18	Assy., GR Control P.C. Board

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only ○ ; For GR75E01C model only

Symbol No.		IN-dex	Part No.	Description
	248	3-G	43A90918F01	Spacer, Polyslider
	249	3-F	44A11063W01	Gear, Bottom A
	250	3-F	44A11064W01	Gear, Bottom B
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B10136W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler A
	265	3-D	44A10379W01	Gear, Pause Idler B
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
●	270	3-A	01V14700W68	Assy., GR Audio P.C. Board
■	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
▲	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
○	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
	271	4-D	41A10097W02	Spring, Clutch
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P06	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F38	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause

Others ; Common

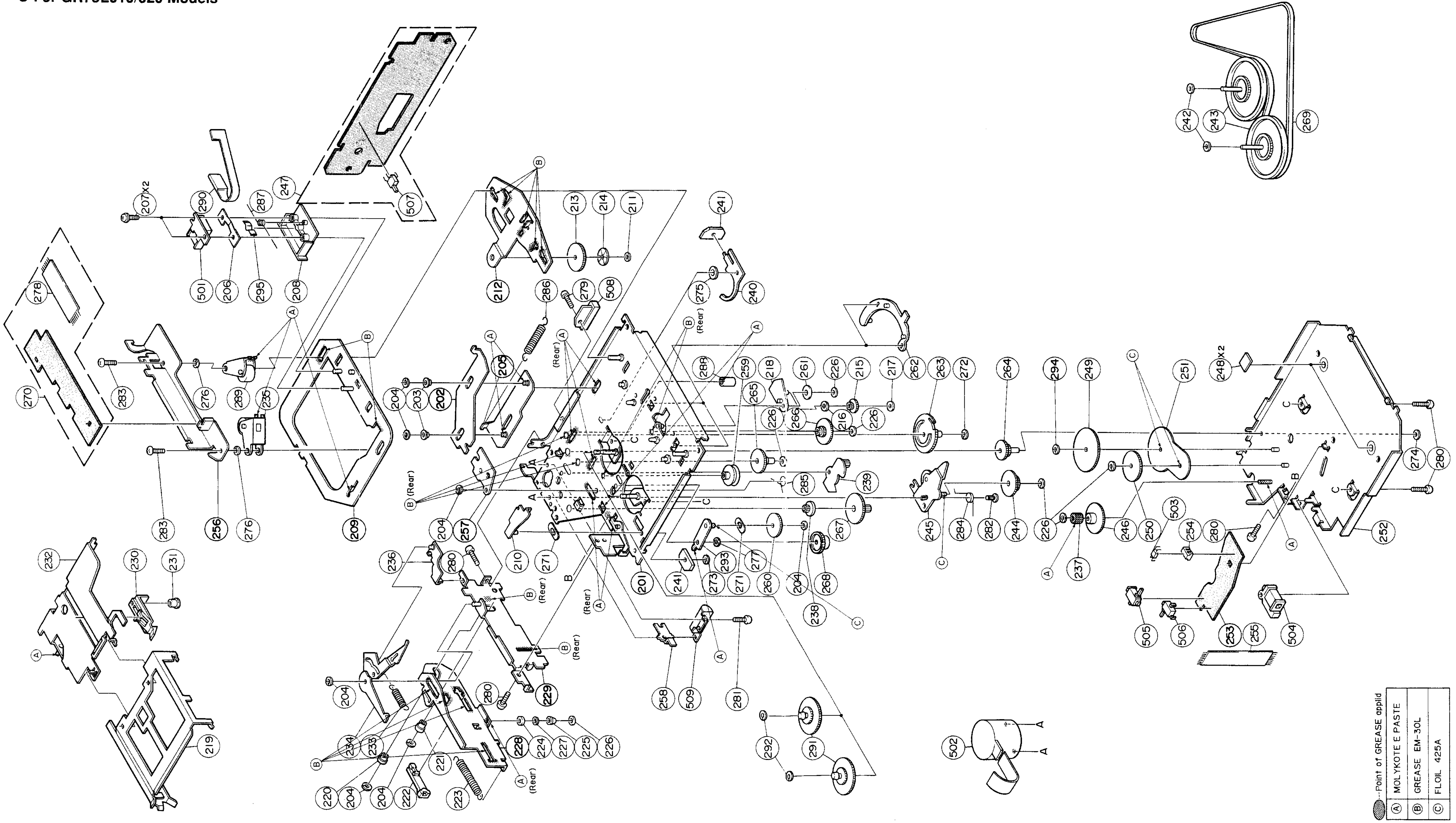
Symbol No.		IN-dex	Part No.	Description
	289	3-B	01B10381W01	Assy., Pinch Roller
	290	2-B	84T10367W01	Head P.C, Board
●	291	4-E	01T15164W01	Assy., Reel
■	291	4-E	01T15164W01	Assy., Reel
▲	291	4-E	01T15164W02	Assy., Reel
○	291	4-E	01T15164W01	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
●	293	4-D	01A11078W01	Assy., Riv Lever Take Up
■	293	4-D	01A11078W01	Assy., Riv Lever Take Up
▲	293	4-D	01A11078W01	Assy., Riv Lever Take Up
○	293	4-D	01A30161W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer, Lock(M1.2)
	295	4-D	75S12196W88	Rubber, Pad
	Miscellaneous			
●	501	2-B	88T15971W01	Head
■	501	2-B	88T10373W01	Head
▲	501	2-B	88T10373W01	Head
○	501	2-B	88T10373W01	Head
	502	4-E	01V11500W64	Assy., Motor
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy.
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector(Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ● ; For GR75E020 model only ■ ; For GR75E010 model only
▲ ; For GR75E01A model only ○ ; For GR75E01C model only

Others ; Common

Exploded View (2/3)

- **For GR75L010/020 Models**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Ⓑ	GREASE EM-30L
Ⓒ	FLOIL 425A

Supp

Cassette Deck Assembly Parts List (2/3)

Note : The parts without parts list are not supplied.

Symbol No.		IN-dex	Part No.	Description
	203	3-C	43A11072W01	Roll, Sub Head
	204		04B41345P01	Washer, Lock(M1.2)
	206	2-B	41A21671W01	Spring, Head
	207	2-B	03S40019G03	Screw, F-Locks(M2x4)
	208	2-B	43B12545W01	Tape, Guide
	210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
	211	2-D	04B41345P29	Washer, Lock(M2.6)
	213	2-D	44A10295W01	Gear, Sensor
	214	2-D	14A10681W01	Reflector
	215	3-E	44A10142W01	Gear, Planet
	216	3-E	41A10097W02	Spring, Clutch
	217	3-E	04B41345P31	Washer, Lock(M1.7)
	218	3-E	01A21853W01	Assy., Riv Lever Reverse
	219	4-B	07B10074W01	Holder, Cassette
	220	5-B	43A12583W01	Roller, Eject
	221	5-C	43A22153W01	Roller, Plate Base
	222	5-C	44A82206F01	Rack
	223	5-C	41B10386W03	Spring, GR(Rack)
	224	4-C	43A10121W01	Roller, Eject(A)
	225	4-D	43A10360W01	Roller, Eject(B)
	226		04B41345P11	Washer, Lock(M1.2)
	227	4-D	43A12377W01	Roller, Eject(C)
	230	4-A	45B10376W01	Slider
	231	4-B	47A63278F01	Shaft, Slider
	232	4-A	01A10212W01	Assy., Riv Plate Base
	233	4-C	41B10386W01	Spring, Eject Arm
	234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
	235	3-B	01B10381W02	Assy., Pinch Roller
	236	4-C	45A10087W01	Lever, Pack In SW.
	237	4-F	44A20314W01	Pinion, Eject
	238	4-E	44A13617W01	Gear, Motor Idler(B)
	239	3-E	01A10201W02	Assy., Riv Lever Pause
	240	2-D	45A10092W01	Lever, Play
	241		76T10374W01	Chip
	242	1-G	04S40075G05	Washer, Polyslider (M2.1)
	243	1-G	01A10368W01	Assy., Flywheel
	244	3-F	44A10141W02	Gear, Eject Idler
	245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
	246	3-F	44A10145W01	Gear, Eject
	247	2-B	01V23700W03	Assy., GR Control P.C. Board
	248	3-G	43A90918F01	Spacer, Polyslider
	249	3-F	44A11063W01	Gear, Bottom(A)
	250	3-F	44A11064W01	Gear, Bottom(B)
	251	3-G	34A11122W02	Washer, GR
	252	3-H	01A10210W02	Assy., Riv. Cover Bottom
	254	3-G	15B11065W01	Guide, Photo
	255	4-G	30T15126W01	Wire, PC Sensor(7P)
	258	4-D	45A10101W01	Lever, Eject Sol.
	259	3-D	49A10131W01	Pulley, Idler
	260	4-E	44A10133W01	Gear, Take Up
	261	3-E	44A10134W01	Gear, Sun
	262	3-E	44B10135W01	Gear, Fix
	263	3-E	44B21670W01	Gear, Pause
	264	3-F	44A10137W01	Gear, Pause Idler(A)
	265	3-D	44A10379W01	Gear, Pause Idler(B)
	266	3-E	44A10138W01	Gear, Reverse Idler
	267	3-E	44A10139W01	Gear, Motor Idler
	268	4-E	44A11062W01	Gear, Reel Idler
	269	1-G	42A10380W01	Belt, GR
★	270	3-A	01V11500W19	Assy., GR Audio P.C. Board
◆	270	3-A	01V14700W68	Assy., GR Audio P.C. Board
	271		41A10097W02	Spring, Clutch
	272	3-F	04B41345P15	Washer, Lock(M1.2)
	273	4-D	04B41345P02	Washer, Lock(M1.7)
	274	3-H	04B41345P17	Washer, Lock(M1)
	275	2-D	04B41345P30	Washer, Lock(M3.1)
	276	3-B	04B41345P32	Washer, Lock(M3.1)
	277	4-E	04B41345P06	Washer, Lock(M2.1)
	278	2-A	30T15126W02	Wire, PC Joint 7P
	279	2-D	03S44205G78	Screw, Pan(M2x6)
	280		03S44205G30	Screw, Pan(M2.6x4)
	281	4-D	03S72235F38	Screw, Pan(M2x3.3)
	282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
	283		03S43997P64	Screw, Pan(M1.7x3)
	284	3-F	41A10384W01	Spring, Eject Clutch
	285	3-E	41A10385W01	Spring, Cas. Push
	286	2-C	41B10386W02	Spring, Sub Head
	287	2-B	41A10387W01	Spring, Pinch Roller
	288	3-D	43A12719W01	Roller, Pause
	289	3-B	01B10381W01	Assy., Pinch Roller
	290	2-B	84T10367W01	Head P.C. Board

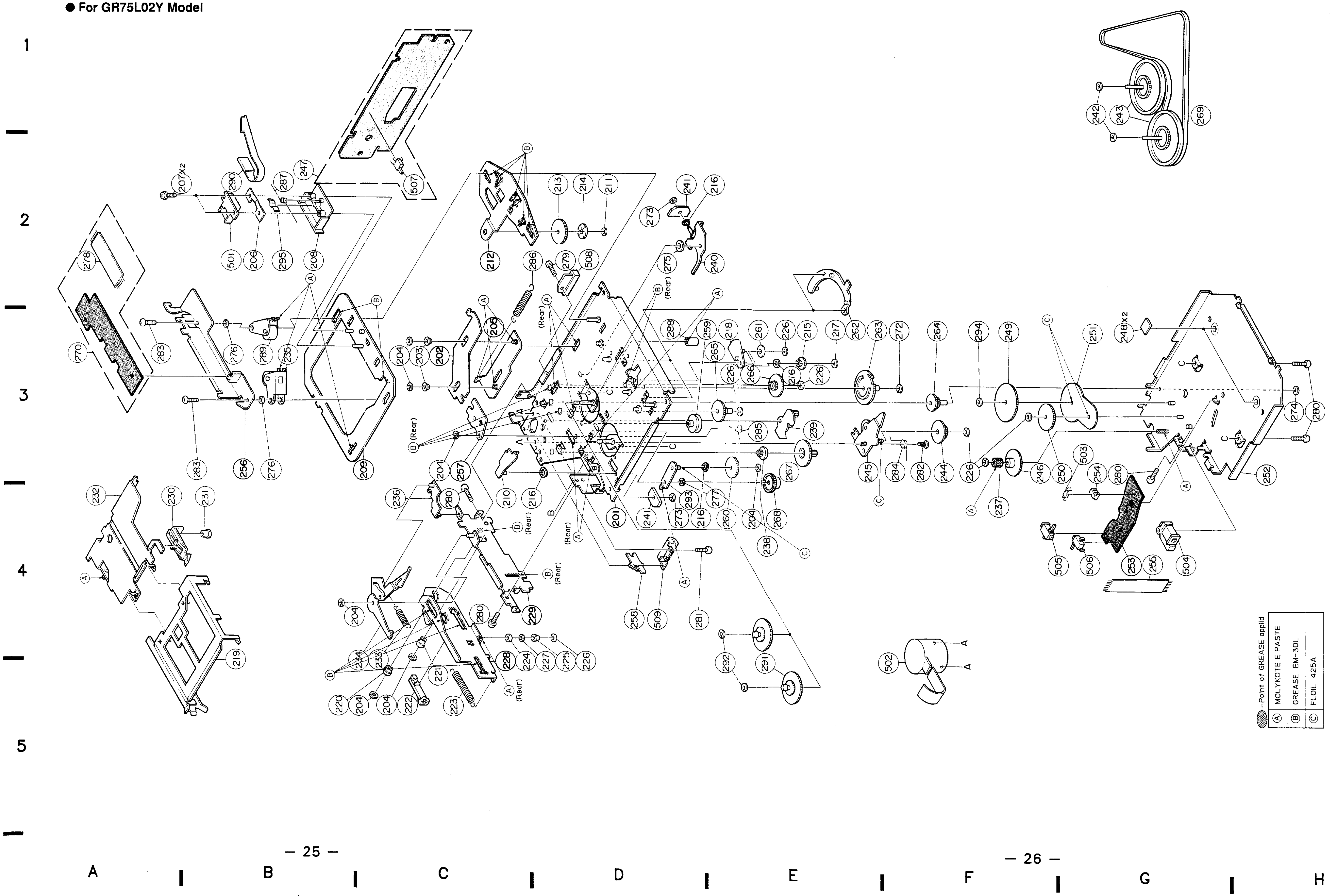
Notes : ★ ; For GR75L010 model only ◆ ; For GR75L020 model only
Others : Common

Symbol No.		IN-dex	Part No.	Description
	291	4-E	01T15164W03	Assy., Reel
	292	4-E	04B41345P12	Washer, Lock(M1.7)
	293	4-D	01A11078W01	Assy., Riv Lever Take Up
	294	3-F	04B41345P34	Washer, Lock(M1.2)
	295	2-B	26A20537W01	Shield, Plate
Miscellaneous				
★	501	2-B	88T10373W01	Head
◆	501	2-B	88T15971W01	Head
	502	4-E	01V23900W60	Assy., Motor
	503	3-G	51T15144W01	Sensor, Photo
	504	4-G	01T10371W01	R/F Sol. Assy
	505	4-F	40T15382W01	SW., Detector (Pack Down)
	506	4-G	40T15382W01	SW., Detector (Metal)
	507	2-C	40T15222W01	SW., Detector (Pack In)
	508	2-D	01T15249W01	Assy., Play Solenoid
	509	4-D	01T10369W02	Assy., Eject Solenoid

Notes : ★ ; For GR75L010 model only ◆ ; For GR75L020 model only
Others ; Common

Exploded View (GR-Y Series) (3/3)

- **For GR75L02Y Model**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Cassette Deck Assembly Parts List (GR-Y Series) (3/3)

Note : The parts without parts list are not supplied.

Symbol No.	IN-dex	Part No.	Description
203	3-C	43A11072W01	Roll, Sub Head
204		04B41345P01	Washer, Lock(M1.2)
206	2-B	41A21671W01	Spring, Head
207	2-B	03S40019G03	Screw, F-Locks(M2x4)
208	2-B	43B12545W01	Tape, Guide
210	4-C	01A10206W01	Assy., Riv Lever R/F Sol.
211	2-D	04B41345P38	Washer, Lock(M2.6)
213	2-D	44A10295W01	Gear, Sensor
214	2-D	14A10681W01	Reflector
215	3-E	44A10142W01	Gear, Planet
216		41A10097W02	Spring, Clutch
217	3-E	04B41345P31	Washer, Lock(M1.7)
218	3-E	01A21853W01	Assy., Riv Lever Reverse
219	4-B	07B10074W01	Holder, Cassette
220	5-B	43A12583W01	Roller, Eject
221	5-C	43A63281F01	Roller, Plate Base
222	5-C	44A82206F01	Rack
223	5-C	41B10386W03	Spring, GR(Rack)
224	4-C	43A10121W01	Roller, Eject(A)
225	4-D	43A10360W01	Roller, Eject(B)
226		04B41345P11	Washer, Lock(M1.2)
227	4-D	43A12377W01	Roller, Eject(C)
230	4-A	45B10376W01	Slider
231	4-B	47A63278F01	Shaft, Slider
232	4-A	01A10212W01	Assy., Riv Plate Base
233	4-C	41B10386W01	Spring, Eject Arm
234	4-B	01A21754W01	Assy., Riv Eject Arm(A)
235	3-B	01B10381W02	Assy., Pinch Roller
236	4-C	45A10087W01	Lever, Pack In SW.
237	4-F	44A20314W01	Pinion, Eject
238	4-E	44A13617W01	Gear, Motor Idler(B)
239	3-E	01A10201W02	Assy., Riv Lever Pause
240	2-D	01A30879W01	Assy., Riv. Play Sol.
241		76T10374W01	Chip
242	1-G	04S40075G05	Washer, Polyslider (M2.1)
243	1-G	01A10368W01	Assy., Flywheel
244	3-F	44A10141W01	Gear, Eject Idler
245	3-E	01A10205W02	Assy., Riv Lever Clutch(A)
246	3-F	44A10145W01	Gear, Eject
247	2-B	01V23700W04	Assy., GR Control P.C. Board

Symbol No.	IN-dex	Part No.	Description
248	3-G	43A90918F01	Spacer, Polyslider
249	3-F	44A11063W01	Gear, Bottom(A)
250	3-F	44A11064W01	Gear, Bottom(B)
251	3-G	34A11122W02	Washer, GR
252	3-H	01A10210W02	Assy., Riv. Cover Bottom
254	3-G	15B11065W01	Guide, Photo
255	4-G	30T15126W01	Wire, PC Sensor(7P)
258	4-D	45A10101W01	Lever, Eject Sol.
259	3-D	49A10131W01	Pulley, Idler
260	4-E	44A10133W01	Gear, Take Up
261	3-E	44A10134W01	Gear, Sun
262	3-E	44B10135W01	Gear, Fix
263	3-E	44B21670W01	Gear, Pause
264	3-F	44A10137W01	Gear, Pause Idler(A)
265	3-D	44A10379W01	Gear, Pause Idler(B)
266	3-E	44A10138W01	Gear, Reverse Idler
267	3-E	44A10139W01	Gear, Motor Idler
268	4-E	44A11062W01	Gear, Reel Idler
269	1-G	42A10380W01	Belt, GR
270	3-A	01V33300W03	Assy., GR Audio P.C. Board
272	3-F	04B41345P15	Washer, Lock(M1.2)
273		04B41345P02	Washer, Lock(M1.7)
274	3-H	04B41345P17	Washer, Lock(M1)
275	2-D	04B41345P30	Washer, Lock(M3.1)
276	3-B	04B41345P32	Washer, Lock(M3.1)
277	4-E	04B41345P37	Washer, Lock(M2.1)
278	2-A	30T15126W02	Wire, PC Joint 7P
279	2-D	03S44205G78	Screw, Pan(M2x6)
280		03S44205G30	Screw, Pan(M2.6x4)
281	4-D	03S72235F38	Screw, Pan(M2x3.3)
282	3-F	03A12132W02	Screw, Eject Clutch (M2x2.3)
283		03S43997P64	Screw, Pan(M1.7x3)
284	3-F	41A10384W01	Spring, Eject Clutch
285	3-E	41A10385W01	Spring, Cas. Push
286	2-C	41B10386W02	Spring, Sub Head
287	2-B	41A10387W01	Spring, Pinch Roller
288	3-D	43A12719W01	Roller, Pause
289	3-B	01B10381W01	Assy., Pinch Roller
290	2-B	84T35271W01	Head P.C. Board

Symbol No.	IN-dex	Part No.	Description
291	4-E	01T15164W03	Assy., Reel
292	4-E	04B41345P12	Washer, Lock(M1.7)
293	4-D	01A30161W01	Assy., Riv Lever Take Up
294	3-F	04B41345P34	Washer, Lock(M1.2)
295	2-B	26A20537W01	Shield, Plate
Miscellaneous			
501	2-B	88T15971W01	Head
502	4-E	01V23900W60	Assy., Motor
503	3-G	51T15144W01	Sensor, Photo
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